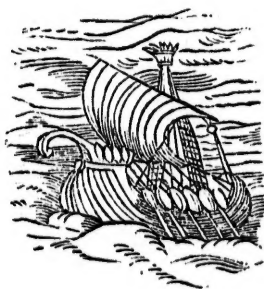
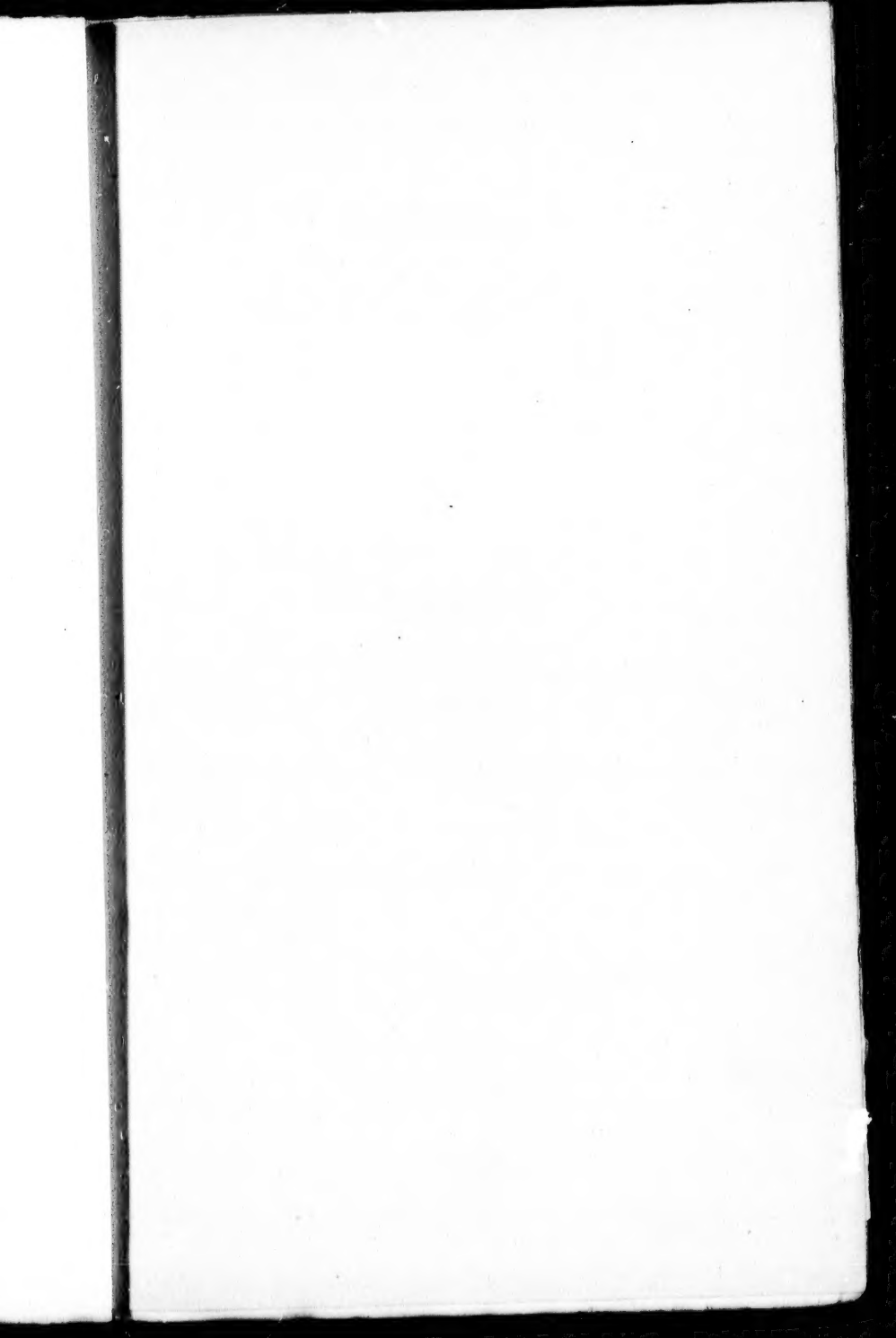


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THE SILVER MAP OF THE WORLD





CHRISTY: "The Silver Map of the World."

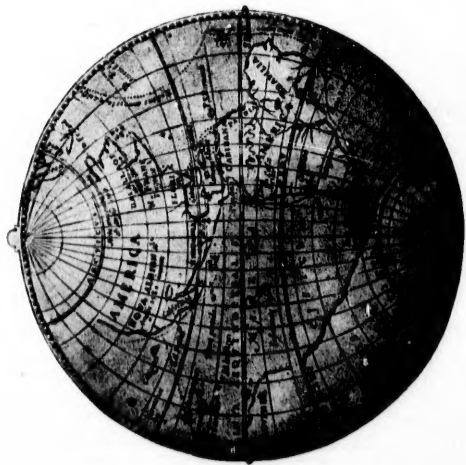
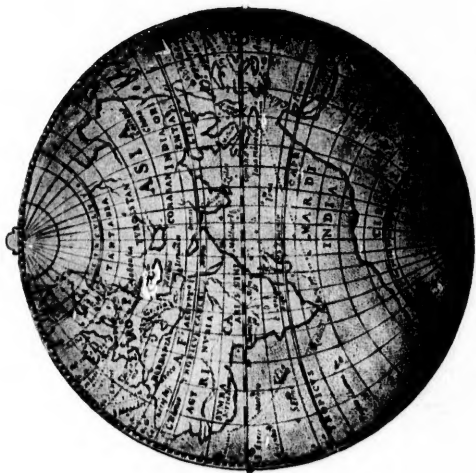


PLATE I (*Frontispiece*).



THE SILVER MAP OF THE WORLD.
(*Size of original.*)

THE SILVER MAP OF THE WORLD.
(Size of original.)



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THE SILVER MAP OF THE WORLD
A CONTEMPORARY MEDALLION
COMMEMORATIVE OF DRAKE'S
GREAT VOYAGE (1577-80)

A GEOGRAPHICAL ESSAY

Including some Critical Remarks on the
Zeno Narrative and Chart of 1558 and on
the Curious Misconception as to the position of
the Discoveries made by Martin Frobisher
in 1576-7-8 which crept into the Carto-
graphy of the North Atlantic and of
the North-Eastern Coast of America
through the Errors of the
ZENO CHART

BY MILLER CHRISTY

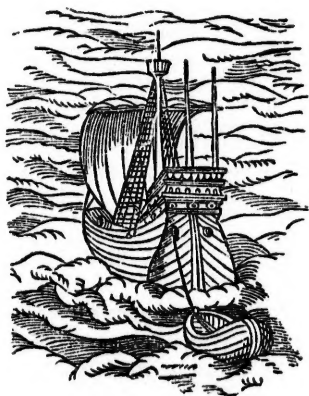
ILLUSTRATED BY FAC-SIMILE REPRODUCTIONS OF THE SILVER MAP AND
SEVEN OTHER CONTEMPORARY CHARTS REFERRED TO AND
BY TWO DIAGRAMMATIC CHARTS



London

HENRY STEVENS, SON, & STILES, 39, GT. RUSSELL STREET
(Over against the British Museum)
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PREFATORY NOTE.

Several years since, my attention chanced to be arrested by a small circular silver plate, engraved with a map of the World, which was displayed in one of the cases in the Mediæval Galleries of the British Museum.

I had, at the time in question, no opportunity for making a careful examination of the plate; but it was easy to see that it belonged to the latter part of the Sixteenth Century, and that it was of considerable interest from the point of view of the student of comparative cartography.

Recently, through the kindness of Mr. Charles H. Read, F.S.A., Keeper of the British and Mediæval Antiquities, I have been enabled, not only to examine the plate with care, but also to obtain photographs of it. Careful examination having now shown it to be of not a little historico-geographical interest, I have prepared the following remarks upon it and the two other examples of it which are known to exist.

The medallion deserves (as it seems to me) more attention than it has hitherto received. Even Mr. Julian S. Corbett, in his superb work, "Drake

and the Tudor Navy" (2 vols., 1898), scarcely notices it, dealing more fully with Drake's military exploits than with the geographical results of his voyages.

A photographic fac-simile of the map on the medallion is given as a frontispiece hereto. This is, I believe, the first time it has been reproduced. At the end of the work will be found photographic fac-similes of seven early charts, which are referred to hereafter because they have, in one sense or another, some bearing upon, or relation to, the map on the medallion. They are, therefore, given herewith in order to facilitate comparison.

For most of the general information I am able to give about the medallion, as a medallion simply, apart from the geographical interest of the map engraved upon it, I am indebted to Mr. Read, and to Mr. H. A. Grueber, both of the British Museum. I have also to thank Messrs. Spink and Son for their kindness in enabling me to inspect the example mentioned hereafter as being in private possession. I am indebted to my friend, Mr. F. W. Lucas, for having kindly gone through my proofs, and made several valuable suggestions, of which I have availed myself.

My thanks are also due to the Marquess of Salisbury for permission to reproduce the chart of Frobisher's first voyage north-westward in 1576, preserved in the Library at Hatfield House (Plate

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IX), and to the authorities of the Middle Temple for permission to reproduce a portion of the Mollineux Globe of 1592, preserved in the Library of that body (Plate X). Neither of these maps has, I believe, ever before been reproduced.

The Zeno Story, discussed in the second appendix, is not, I admit, very directly connected with the main subject of the present work; but, as the far-reaching results of the publication of that story in 1558 had to be noticed in the body of the work, it may not be considered altogether superfluous to notice some minor points in connection with the story and the chart accompanying it.

M. C.

CHELMSFORD,

January, 1900.



TITLE
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CONTENT
LIST OF

§ I.—

§ II.—

§ III.—

§ IV.—

§ V.—

§ VI.—

§ VII.—

APPEND

APPEND

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LIST OF ILLUSTRATIONS.

(A.—*Photographic Fac-simile, forming Frontispiece.*)

- (i.) THE DRAKE MEDALLION ("THE SILVER MAP OF THE WORLD"), OF (?) 1581.

Size of original; from an example in the British Museum.

(B.—*Diagrammatic Charts, facing pages 24 and 54.*)

- (ii.) CHART OF THE NORTH ATLANTIC, WITH THE ZENO CHART OF 1558 SUPERIMPOSED THEREON, AND SHOWING THE REAL AND THE SUPPOSED ROUTES SAILED BY FROBISHER IN 1576-7-8.

Designed by the author; referred to on pages 22-26.

- (iii.) CHART OF THE NORTH ATLANTIC, WITH THE ZENO CHART OF 1558 SUPERIMPOSED THEREON, SHOWING THE RESULT OF ADJUSTING ITS ERRONEOUS LATITUDES.

Designed by the author; referred to on pages 55-61.

(C.—*Photographic Fac-simile Reproductions of seven early C¹ - "referred to; placed at the end of the work."*)

- (iv.) THE ZENO CHART, OF 1558.

Reduced; from the *Commentarii del Viaggio . . . da due fratelli Zeni*, . . . (Venice, 8°, 1558).

- (v.) BEST'S MAP OF THE WORLD, OF 1578, SHOWING FROBISHER'S DISCOVERIES.

Reduced; from *A True Discourse of the late Voyages of Discoverie, . . . under the Conduct of Martin Frobisher*, . . . [By Captain George Best] (London, 4°, 1578); referred to on page 28.

- (vi.) BEST'S MAP OF FROBISHER'S DISCOVERIES IN 1576-7-8.

Reduced; from Best's *True Discourse* (London, 4°, 1578); referred to on page 28.

(vii.) MICHAEL LOK'S MAP, DATED 1582.

Reduced; from Hakluyt's *Divers Voyages touching the Discoverie of America* (London, 4^o, 1582); referred to on page 29.

(viii.) MAP OF THE NEW WORLD, OF 1587, BY F.G.

Size of original; from Hakluyt's edition of Peter Martyr's *De Orbe Novo* (Paris, 8^o, 1587); referred to on pages 30 and 41.

(ix.) CHART BY WHICH FROBISHER SAILED IN 1576;
DRAWN BY WILLIAM BOROUGH.

Reduced; original size 33½ inches by 27 inches; in the possession of the Marquess of Salisbury at Hatfield House; referred to on pages 30-32 and 47-49.

(x.) PART OF EMERY MOLLINEUX'S TERRESTRIAL
GLOBE, OF 1592.

Reduced; drawn for the author by Mr. J. W. Addison; original in the possession of the Middle Temple, London; referred to on page 35.



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THE
SILVER MAP OF THE WORLD:
A CONTEMPORARY MEMENTO OF
DRAKE'S GREAT VOYAGE.

§ I.—INTRODUCTION.

THE following pages are devoted to an examination of a very rare and interesting medallion which may, on account of the design it bears, be spoken of, both appropriately and for the sake of convenience, as "The Silver Map of the World." Only three "copies" or examples of it are known to exist—each of them being identically the same in all but the most trivial respects.

Each of these three examples consists of a thin circular silver plate, 70 millimetres (about $2\frac{7}{8}$ ths of an inch) in diameter, of uniform thickness in all parts (there being no thickened rim), with a small semi-circular projection or "tang" at the top (the north, that is), which is clearly intended to be pierced if the owner should desire. On the

two sides is represented, in considerable detail, the World as known at the date when the medallion was produced, the Eastern Hemisphere being represented on one side and the Western on the other. A dotted line, against which ships in full sail and several legends are placed, indicates the route followed by Sir Francis Drake on his famous voyage round the world in the years 1577 to 1580—the first circumnavigation accomplished by an Englishman and the second ever achieved.

The plate bears no inscription or indication of any kind showing the name of the maker or the date when it was made; but it is obviously the work of a very expert cartographer; and, for reasons which will be brought forward hereafter, it may be assumed that it was produced in the year 1581. This was the year following that of Drake's return from his famous voyage, and there can be no reasonable doubt that the piece was prepared in commemoration of this voyage. It may, therefore, be regarded almost as a Monument of our National History.

The three known examples are as follows :

(1) That, above-mentioned, in the Mediæval Department of the British Museum,*

* Reference Number, 1891.9.5.12.

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to which it was presented by the late Sir Wollaston Franks in 1891. It is in rather poor condition, being somewhat battered and slightly broken. This is probably due, in part, to the fact that it is thinner, and consequently lighter, than either of the other two known examples. It weighs only 260 grains troy, and has the tang pierced. This specimen was discovered, some years since, in a silversmith's shop, among other old objects in silver, by Mr. Charles H. Read, by whom it was purchased for a few pounds for the late Sir Wollaston Franks.*

(2) The second example known to exist is also in the British Museum, in the Coins and Medals Department,† to which it was presented also by Sir Wollaston Franks, by whom it was obtained from an unknown source many years since. From it was made the photograph which forms the frontispiece. It is in excellent—in fact, in perfect—preservation, and is thicker than that noticed above, weighing 300.6 grains troy. It has the tang unperforated.

(3) The third known example was formerly in the possession of the late Lord

* If this example was not one which Sir Wollaston Franks had owned and lost some years previously (as is quite possible), there is yet a fourth example of the medallion in existence somewhere.

† Reference Number, 1882.5.7.1.

Dillon, whose collection (in which it formed lot 714) was sold at Sotheby's in 1892. The piece in question was then purchased for the sum of £46 by Messrs. Spink and Son, on behalf of Mr. John G. Murdoch, in whose possession it still remains. It is by far the best of the three known examples. Beside being in perfect condition, it weighs no less than 424 grains troy. Thus it is more than one-third heavier than either of the other examples—a remarkable difference. It has the tang pierced.

The two examples last mentioned were exhibited before a meeting of the Society of Antiquaries, held on March 12th 1874, by Sir (then Mr.) Wollaston Franks, who briefly drew attention* to their leading points of interest, chiefly from the point of view of the numismatist. As was pointed out by Franks on this occasion, the design on each example is identical, every line being repeated in such absolute *fac-simile* on each as to preclude the possibility of either of them having been engraved. The medallions have, in fact, been either cast or struck—probably the latter. This fact renders them of special interest, for numismatic pieces of the kind are decidedly uncommon. Franks stated, on the occasion in question, that he had for years taken an

* See *Proceedings of the Society of Antiquaries*, and series, vol. vi., pp. 161-163.

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interest in such "medallions and counters simulating engraving," as he styled them. Nearly all the known examples of such pieces were (he said) either produced in England or are in some way connected with English history. He referred to a set of twelve such pieces, mostly oval portrait-medallions of English Sovereigns or Statesmen, but all smaller than the Silver Map. Most of these bear the name of Simon van de Passe, whose work they all probably are.* Franks also, on the occasion in question, referred to another set of thirty-six such pieces, most of them bearing portraits of English Sovereigns, apparently executed about the year 1630. These are too late in date to be by Simon van de Passe, to whose work they are, moreover, decidedly inferior. Franks also made mention of various other smaller counters, not belonging to any known sets, and of later date than the foregoing, though bearing, like them, portraits of English Monarchs and Statesmen. All these counters or medallions, though commonly supposed to be engraved, were (said Franks) evidently either struck or cast, the design on different

* Passe, or van de Passe, was a prominent portrait-engraver of Dutch birth, who, after residing six or seven years (1616-22) in England, entered the service of King Christian IV. of Denmark. His earliest known work was executed in 1613.

specimens of each of them being too closely identical to allow of the possibility of their having been produced by any other means.

Two facts in connection with the Silver Map are brought out prominently by the foregoing statements :

The first is that, of all these "medallions and counters simulating engraving," the Silver Map is the largest known. As Franks observes* :

"To strike such large plates as those representing the voyage of Sir Francis Drake must have required great skill and patience. Equally great precautions would be required to cast them without leaving inequalities, especially in the case of the thinnest plate."†

The second fact is that the Silver Map is earlier in date than any other of these plates, apparently engraved, but really struck. From this fact, Franks was led to infer that the Map might not be contemporary with the voyage it represents.

"As we are not acquainted with plates of this kind of work earlier than the latter part of Elizabeth's reign, it is probable [he says‡] that those with Drake's circumnavigation [of the World represented upon them] may be of somewhat later date than that event."

In support of this surmise, Franks goes on to show that memorials of Drake were produced

* *Op. et loc. cit.*

† That is, the example numbered 2 on page 3.

‡ *Op. et loc. cit.*

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vol. i., p*

long after his death, as shown by the fact that there is now in the British Museum (to which it was presented by Franks himself) a tobacco-box of pressed horn, bearing the Arms of Sir Francis Drake and an inscription showing that it was made by John Obrisset in 1713—one hundred and seventeen years, that is, after Drake's death.*

In this surmise, however, Franks was undoubtedly at fault; for it can hardly be doubted, in the face of evidence to be produced hereafter, that the plate is really contemporary with Drake's voyage.

Since the Silver Map was exhibited before the Society of Antiquaries on the occasion alluded to, it has also been briefly noticed in Messrs. Hawkins, Franks, and Grueber's work on English medals.†

Messrs. Franks, Hawkins, and Grueber have, however, all written of the piece in question mainly from the antiquarian point of view, and have regarded it chiefly as an

* Among the relics shown in the Exhibition got up at the time of the Armada Ter-centenary Commemoration at Plymouth, in 1888, several similar horn boxes, made by Obrisset, were exhibited.

† *Medallic Illustrations of the History of Great Britain and Ireland*, by Edward Hawkins, F.R.S.; edited by A. W. Franks and H. A. Grueber (London, 2 vols. dy. 8°, 1885), vol. i., p. 131.

ancient and interesting medallion. Though they have, of course, briefly noticed the more obvious points of geographical interest which the map engraved upon it displays, none of them has attempted to treat in any detail of its more interesting features from the point of view of the student of comparative cartography. To do this will be my chief object in the following remarks.

§ II.—THE MAP ON THE MEDALLION.

Regarded as a map, the design on the medallion is, for its size, very beautifully and exactly executed. It might be thought, not altogether unreasonably, that, on such a production as a medallion, or on any similar production not primarily intended for use as a map, a largely-conventional representation of the World would answer all purposes; but it is clear, upon examination, that, in this case, nothing of the kind was deemed sufficient. The map is evidently the work of some Master of the Art of Cartography; while the geographical information it conveys will be found thoroughly accurate, so far as it could be at the time. It is not too much to say that no other *mappe-monde* of the size and

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period is at once so well executed, so exact, and so completely up-to-date.*

It has already been stated that the map represents the World in hemispheres, the eastern being represented on one side of the plate and the western on the other side. For the sake of distinction, the land is represented plain, the seas and oceans being stippled. The Initial Meridian selected is that of the Island of Ferro, in the Canaries, as was usual at the period. Every tenth line of latitude is shown and numbered, and each degree is indicated on the margin. Each tenth line of longitude is also shown and numbered (except those from 210 to 330, the figures of which

* For the sake of comparison, attention may be called to a small circular Map of the World, about two inches in diameter, engraved, together with many other figures, on the dial of the very elaborate clock, made by Isaac Habrecht, of Strasbourg, in the year 1589, and now in the British Museum. In point of size and date, and owing to the fact that neither was intended primarily for use as a map, this Clock Map may fairly be compared with the Silver Map; but the vastly-greater perfection of the latter, as compared with the former, may be gathered from the statement that, on the Clock Map, the various countries of the world are shown in a wholly conventional manner and in outline merely; whilst it bears only five names (*Europe, Asia, Peru, Oceanus, and Terra Incognita*), against no fewer than 110 names on the Silver Map, as will be shown hereafter.

are missing, perhaps through an oversight*), and each degree is also indicated, as far as possible, on the Equator. The Equator (*Linea Æquinoctialis*), the Arctic Circle (*Circulus Arcticus*), the Antarctic Circle (*Circulus Antarticus*), the Tropic of Cancer (*Tropicus Cancræ*), and the Tropic of Capricorn (*Tropicus Capricorni*) are all shown and named. In addition to these, and eight inscriptions or legends (to be noticed hereafter), the map bears no fewer than 110 geographical names (67 on the Eastern Hemisphere and

* It is worthy of note, however, that there are similar *lacunæ* in the numbering of the degrees of longitude covering the Pacific Ocean, from 211° to 272° , on the splendid *Mappemonde* of 1546, by Pierre Desceliers, in the possession of the Earl of Crawford and Balcarres (*Bibl. Lindesiana, French MS.*, no. 15), and from 270° to $175^{\circ} 30'$, on the equally-fine *Mappemonde* of 1550, also by Desceliers, now in the British Museum (*Add. MS.*, no. 24065). Mr. C. H. Coote suggests (*Autotype Facsimiles of three Mappemondes [by Desceliers of 1536 (circa), 1546, and 1550], Bibliotheca Lindesiana*, no. 4, 1898) that these *lacunæ* are due to the fact that, at the time these maps were drawn, the region covered by the *lacunæ* was unknown to the French. This scarcely seems an adequate reason for the omission of the figures; for surely they could have been inserted, according to geometrical measurement, without any knowledge of the nature of the surface covered. There seems, however, to be no other assignable reason.

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Noruegia
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EASTERN HEMISPHERE (68 NAMES).

1. Perhaps Keeling Islands.
2. Madagascar.
3. The St. Paul's Rocks.
4. Probably Annobon.

WESTERN HEMISPHERE (44 NAMES).

[NORTH] AMERICA	[SOUTH AMERICA (<i>contd.</i>)]	[ATLANTIC ISLANDS (<i>contd.</i>)]
BACALLAOS*	Mucho ⁵	Cuba
N[OVA] FRANC[IA]	Fretum Magellani	Spaniola ¹⁰
Virginea	Patagones	
NOVA ALBION*	Baia S. Marie ⁶	MARE PACIFICVM
Californea	S. Rochus ⁷	Cazones ¹¹
FLORIDA	BRASILIA	I. de Passao ¹²
N[OVA] HISPANIA	PARIA	Rocca partita ¹³
Mexico	CARIBANA	Infortunates
		Insules ¹⁴
		I. d. los Reyes ¹⁵
		I. os Iardines ¹⁶
		Zamali ¹⁷
		Ins. Latronum ¹⁸
		2 hormonas ¹⁹
		No[VA] GVINEA
		[TERRA AV]STRALIS
		[NVNDVM] COG-
		NITA.
[SOUTH] AMERICA	[ATLANTIC ISLANDS (<i>contd.</i>)]	
Panama	Groenlan[d]	
Lima	Island	
Cusco	Frisland	
Arica	Accores I.	
PERV	I. S. Bernardi ⁸	
Coquimbo	S. Juan ⁹	
Chili	Iamaica	

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| 5. The Island of Mocha. | 14. Perhaps Easter Is- |
| 6. The Estuary of the Rio | land. |
| de la Plata. | 15. Perhaps Christmas |
| 7. Cape St. Roque. | Island. |
| 8. Trinidad or Tobago. | 16. Los Jardines Islands. |
| 9. Puerto Rico. | 17. Of doubtful identifica- |
| 10. Santo Domingo. | tion. |
| 11. Probably Farellones. | 18. Perhaps the Pelew Is- |
| 12. Probably Guadelupe. | lands. |
| 13. One of the Revilla | 19. "Two Brothers"; of |
| Gigedo Islands. | doubtful identification. |

* These two names form part of two of the eight inscriptions mentioned above.

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Most of these names, it will be observed, are more or less Latinised in form. Those in the Pacific Ocean and in South America, are, however, largely Spanish in form, as was natural, considering that, at the time when the Silver Map was made, the Spaniards alone frequented those regions. Of the cities named, six (namely, Jerusalem, Calecut, Mexico, Lima, Arica, and Coquimbo) are actually represented in a conventional manner.

Of the names given, there are two which require special notice here.

The first is Bacallaos, which forms part of the first of the eight legends alluded to above—BACALLAOS [*inuenta*] *ab. Ang.* 1490.* This name (which is of somewhat uncertain origin and vague application) was applied generally to the region discovered by John Cabot in 1497. The fact that the date should be given as 1490 is probably due to an oversight and without significance.

The second of the two names might be regarded, from some points of view, as a legend or inscription; but, as it differs from the other seven legends already alluded to, in that it does not record actual navigation or discovery, it is more convenient to treat it as

* Bacallaos [discovered] by the English in 1490 (*i.e.*, 1497).

a name. It is, TERRA AUSTRALIS NUNDUM COGNITA,* and is applied to the imaginary Great Southern Continent, the existence of which was believed in at the time the Silver Map was made.

§ III.—DRAKE'S ROUTE (1577-80), AS SHOWN
BY THE DOTTED LINE ON THE MAP.

The most prominent feature on the Map is the dotted line (already alluded to) which indicates the route followed by Drake on his famous voyage round the World in the years 1577 to 1580.† The line showing Drake's outward voyage is accompanied by

* "The southern land not yet explored."

† Magellan's circumnavigation of the Globe in 1520 was first indicated by a dotted line, much as Drake's is represented on the Silver Map, on Johann Schöner's reputed "third" Globe of 1523 (see *Johann Schöner, Professor of Mathematics at Nuremberg, a Reproduction of his Globe of 1523, long lost, . . . ; By Henry Stevens, . . . ; Edited, with an Introduction and Bibliography, By C. H. Coote, . . .* London: Henry Stevens & Son, 1888, 8°, pl. 5). Magellan's route was next (so far as is known) similarly shown on the "Globe Doré," of 1528-29, preserved in the Bibliothèque Nationale, Paris (reproduced in part by Marcel: *Réproductions*, 1893, pl. 21). A line, against which several inscriptions are placed, also represents Magellan's route on several maps in *portolani* made by Battista Agnese, of Genoa, notably those dated 1536, 1532-40 (?), 1543 (see *Johann Schöner*, p. xxxi), and 1554 (the latter having been reproduced in photographic *fac-simile* by Ongania of Venice in 1881).

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two ships and two inscriptions: *Draci Exitus** and *D. F. Dra. Exitus anno 1577 id. Dece.*†

It may be well here to remind the reader that Drake's wonderful voyage was not, at the outset, intended to accomplish a circumnavigation of the Globe. Its object, judged by present-day standards, was scarcely to be distinguished from piracy, as was the case with many other more or less similar voyages of that time. Drake set out solely to extort from the Spaniards, by seizing their shipping and property, redress for losses which he had, or thought he had, suffered at their hands. This much was known to everyone, but there was much secrecy as to the precise locality in which his operations were to be carried out. It was generally believed that his destination was the West Indies or the adjacent mainland; and not until his fleet was well at sea was it given out that he intended to prey upon the commerce of the Spaniards in and about the estuary of the Rio de la Plata, and on the western coast of South America—a region in which the Spaniards had never before been assailed, because they alone had then penetrated thither. If his proceedings were almost purely piratical,

* "Drake's going forth."

† "Sir Francis Drake's departure in the year 1577, on the Ides of December [*i.e.*, December 13th.]"

judged from our point of view, they were at least no worse than those of his enemies, the Spaniards, upon whom he sought to be revenged.

Drake's fleet consisted, at the outset, of five vessels—the *Pelican* (afterwards the *Golden Hind*), of 100 tons, in which he himself sailed, the *Elizabeth*, of about 80 tons, and three smaller vessels, the *Marigold*, the *Swan*, and the *Benedict*.

It is not necessary here to notice, even cursorily, any except the leading events of Drake's voyage, which extended over nearly three years; but it will be worth while briefly to trace his route in order to show how closely it is represented on the Silver Map.

Leaving Plymouth on December 13th 1577, Drake sailed well out into the Atlantic, avoiding the coasts of Spain, in order that he should not be seen by any Spanish ships. On the 27th, he reached the Island of Mogador, near the cape of the same name, on the north-west coast of Africa. It is shown and named on the Silver Map, as are nearly all the other places touched at by Drake on this voyage. Crossing the Atlantic by way of the Cape Verde Islands, Drake fell in with the coast of Brazil (named) on April 5th 1578. Ten days later, passing Cape St. Mary on the north side of the

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entrance to the Rio de la Plata, he entered the estuary of that river (called *Baia St. Marij* on the Silver Map) on the 15th. After stopping in more than one place, in order to collect his fleet or to refit his ships, he decided to leave behind the *Swan* and the *Christopher*,* which had become unseaworthy, and they were accordingly dismantled and broken up. Thus his fleet consisted of only three ships when he entered the Strait of Magellan (named) on August 21st. Three days later, he named three islands, one of which he called Elizabeth Island, after the Queen. On September 6th, the strait was at last passed, and the Pacific was for the first time sailed by an English ship. This event is alluded to in the fourth of the eight inscriptions: *In R. Elisabetæ, 1579, ab Anglij.*† It is strange that, by an oversight, the year should have been given as 1579, instead of 1578. Two days later, a violent storm arose, which lasted fifty-two days and drove Drake southward as far as lat. 57° S., causing him facetiously to remark that the ocean would have been better called *Mare Furiosum* than *Mare Pacificum*. In the course of this unintentional digression from

* The latter had been captured *en route* and exchanged for the *Benedict*.

† "[The Strait of Magellan first passed] by the English in the reign of Queen Elizabeth, in the year 1579 [*i.e.*, 1578]."

his intended route—which digression is clearly indicated on the map by means of the dotted line—Drake ascertained, for the first time, that the land known as Tierra del Fuego did not, as had been previously supposed, form part of a great Southern Continent (which was called Terra Australis and was supposed to be of enormous extent), but that it was a large group of islands, with open sea to the south. During this storm, the *Marigold* foundered with all hands, while the *Elizabeth* became separated from her consort and afterwards returned home, leaving Drake only his own ship, now renamed the *Golden Hind*. The storm abating in time, Drake set sail northward, reaching on November 29th (1578) the island of La Mocha (named). He continued sailing on steadily northward, up the western coast of South America, passing in succession Valparaiso (not named), Coquimbo (named), Arica (named), Lima (named), Panama (named), and Guatulco (not named), everywhere surprising the Spaniards and seizing their ships and property, the latter including large quantities of gold and silver.

At last, sated with this kind of piracy, Drake concluded that he was adequately revenged upon the Spaniards for losses which he had suffered at their hands, and he then thought of returning home. To repass the

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Strait of Magellan, now that the Spaniards were thoroughly aroused and his fleet consisted of a single ship only, appeared to him too hazardous. He, therefore, continued his course northward, in order to try to discover a route homewards, from the Pacific to the Atlantic, round the northern parts of North America. Very probably Drake, just before his departure from England, had heard from Frobisher of the remarkable strait on the east coast of North America the latter had discovered and entered in the summer of 1577, which had (as mentioned hereafter) appeared to him likely to prove a veritable sea-passage leading from the Atlantic to the Pacific. This strait, which Frobisher called "The Mistaken Strait," was that now known as Hudson's Strait. There can be very little doubt Drake hoped that he might be able to discover a western entrance into this reported strait and that he would be able to return home through it: otherwise, he would not have continued to sail up the western coast of North America as far as he did.

Drake continued sailing northward, searching for a passage leading eastward from the Pacific into the Atlantic, until he met with high contrary winds and severe cold, when he decided, with the consent of all on board, to relinquish this project and to return home

round the World by way of the Moluccas and the Cape of Good Hope. The dotted line on the Map makes it appear that he had reached the latitude of about 48° N. before thus turning back. It is probable that he had never, up to this point, seriously contemplated a circumnavigation of the Globe.

The fact that Drake at one time contemplated searching (albeit backwards, as one may say) for a North-West Passage round the north of North America has almost escaped the notice of recent historical and geographical writers. How bold his project was for the period may be inferred from the fact that almost exactly two centuries elapsed before it was renewed, in the years 1776-8, by Captain Cook.

Coasting next southward, in order to find a harbour in which to refit his ship for the voyage across the Pacific, Drake, in June 1579, entered what is now called the Bay of San Francisco. There he remained several weeks, taking possession, in the Queen's name, of the adjacent country, which he called Nova Albion. It is now known that the Spaniards had been there previously, but Drake imagined himself to be the discoverer of the country, to which belief the fifth of the eight legends on the Silver Map bears testimony: *NOVA ALBION ab Anglie 1580*

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inuenta.* Again, we see the strange error of a year in the date given, for which it is not easy to account, unless it is due merely to inadvertence.

On July 23rd (1579), Drake left the Bay of San Francisco. Sailing westwards, straight across the Pacific, on November 14th (1579), he reached the Moluccas (named), visiting, in the spring of 1580, Motir (not named), Celebes (named), Batjan (not named), and Java Major (named). Crossing the Indian Ocean (named as *Mar di India*), he rounded the Cape of Good Hope (named as *C. Bona Spei*)—near which the dotted line indicating his course is inscribed *Reditus* †—passed Sierra Leone (named), and ultimately arrived in England on September 26th, as the seventh of the eight inscriptions records: *Reditus anno 1580, 4 Cal. Oc.*‡

It will be clear from the foregoing that the medallion must have been prepared (as already stated) especially to commemorate Drake's ever-memorable voyage.

* "New Albion discovered by the English in 1580 [*i.e.*, 1579]."

† "Return." This is the sixth of the legends.

‡ "Return in the year 1580, on the 4th of the Kalends of October [*i.e.*, September 26th]." Of the many dates given by different authorities as that of Drake's return to England, this is the one which Mr. Corbett selects (*Drake and the Tudor Navy*, vol. i, p. 329 *n*) as most probably correct.

§ IV.—THE CAUSES OF THE MISCONCEPTION
AS TO THE POSITION OF FROBISHER'S
DISCOVERIES.

Notwithstanding the fact that the Silver Map is mainly of interest in connection with the great voyage of Sir Francis Drake, examination will show that, incidentally, it is also of not a little interest in connection with the three contemporary voyages of Sir Martin Frobisher in search of a North-west Passage in the years 1576-7-8. This arises from the fact that it is one of the very few known maps of the period which show the region explored by Frobisher in the course of these voyages in its correct position on the eastern coast of America, instead of on the eastern coast of Greenland, where all later maps and charts erroneously placed it until quite a recent date. The circumstances which led to this extraordinary geographical misconception—one of the strangest and most long-enduring on record—are worthy of some notice here. They are briefly these:—

In 1558, there was published in Venice a small book which purported to relate the voyages in the North Atlantic, at the end of the Fourteenth Century, of Nicolo and Antonio Zeno, two brothers, members of a leading Venetian family. The book claimed to have

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been compiled, just before the date of publication, from the remains of old family papers, by a later Nicolo Zeno, a descendant of the Antonio mentioned above, and it was illustrated by means of a Chart of the North Atlantic, stated to have been also derived from the same source.

Mr. F. W. Lucas, in one of the most masterly works recently published on any phase of the history of geography,* has shown conclusively that the Zeno book was, at best, little more than a fraudulent concoction from earlier genuine books and charts. He has endeavoured also to maintain that the Zeno Chart is equally fraudulent; but, on this point, his arguments seem somewhat less conclusive.† In any case, however, neither the book nor the chart contained in it possesses any real historical or geographical value. Nevertheless, on their appearance in 1558, both were at once accepted as genuine, even by the most eminent geographers, many of whom incorporated the Chart almost bodily into their own maps and charts. This gave rise

* *The Annals of the Voyages of the Brothers Nicolo and Antonio Zeno in the North Atlantic about the End of the Fourteenth Century, and the Claim founded thereon to a Venetian Discovery of America: A Criticism and an Indictment.* By Fred. W. Lucas. . . . Illustrated by Fac-similes. London: Henry Stevens, Son, and Stiles, . . . MDCCCLXXXVIII (234 pp. royal 4°, 18 maps).

† Some further remarks upon this point will be found in Appendix B (p. 49).

to an enormous amount of cartographical confusion, some traces of which may even be found on charts drawn within the present century.

The Zeno Chart will be found reproduced in *fac-simile* (Plate IV), among other early charts, at the end of this work. The only two facts in connection with it which need be specially noticed here are :

- (1.) That, though it represents Greenland (called "Engroneland") with fair accuracy as regards outline, the whole country is placed far to the north of its true position, its most southerly point being placed in lat. $65^{\circ} 40'$, instead of in about lat. 60° ; and
- (2.) That it shows, apparently in the middle of the Atlantic, a very large and wholly imaginary island called "Frislanda," the southernmost point of which is placed in about lat. $60^{\circ} 50'$.

These two features will be clearly seen on reference to the diagrammatic chart opposite which has been prepared by the author to show, as far as possible, the errors and misconceptions which led to the long-enduring confusion as to the real situation of the localities visited by Frobisher. On this map, the Zeno Chart of 1558, with all its errors, is shown (in red) superimposed upon a correct modern chart (in black) of the North Atlantic. The boundaries of the Zeno Chart are indicated by the red lines appearing on

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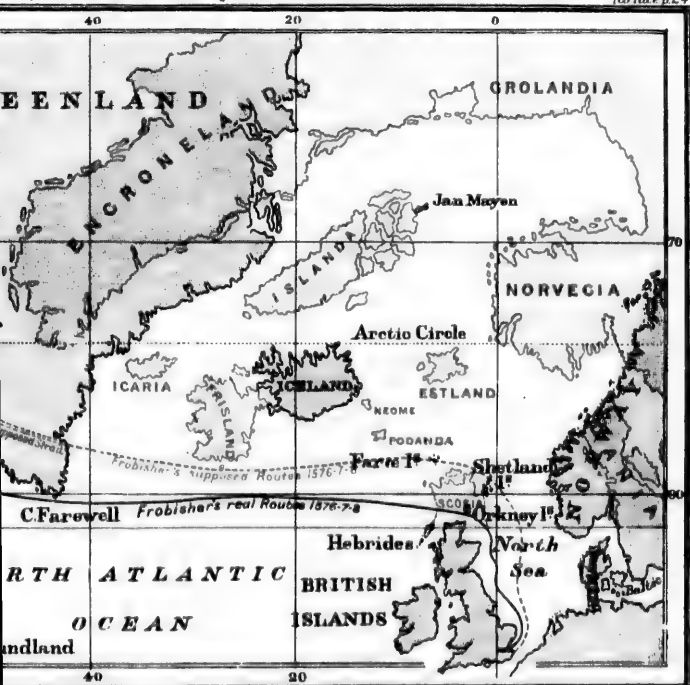


Designed by Miller Christy.

CHART OF THE NORTH ATLANTIC, WITH THE ZENO CHART OF 1558 SUPERIMPOSED
ROUTES SAILED BY FROBISHER

Real Geography in black.

Zenun.



Drawn by J.W. Addison.

ZENO CHART OF 1558 SUPERIMPOSED THEREON, SHOWING THE REAL AND THE SUPPOSED
 ROUTES SAILED BY FROBISHER IN 1576-7-8.

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the larger chart in lat. 59° N. and long. 68° W. It has not been found possible to superimpose the Zeno Chart upon the modern one with as much precision as one would have desired, owing to the great errors in the longitudes of even the identifiable lands shown on the Zeno Chart and the doubt as to what some of the other lands shown thereon really represent, if anything. The longitudes of the Zeno Chart have been largely disregarded. They must, in any case, have been laid down largely by guess work, owing to the lack of any accurate means of ascertaining longitude at the time, and are, therefore, of little importance.* But the errors in *latitude* (to which

* Thus, for the sake of clearness and convenience, the Zenian "Islanda" has been moved slightly to the eastward and the Zenian "Frislanda" slightly to the westward, in order to avoid contact with the adjacent coasts of the real Greenland and the real Iceland respectively; while "Estotiland" and "Drogeo" have (also for the sake of convenience) both been moved sufficiently far to the westward of their position on the Zeno Chart to incorporate them with the eastern coastline of the American Continent. This was a common practice with the old cartographers, who (commencing with Mercator in 1569) generally identified these perplexing lands with parts of Labrador or Newfoundland; but it must not be concluded from this that the present writer so identifies them. Whatever the compiler of the Zeno Chart intended them to represent—and they may be nothing more than a result of his imagination—no evidence exists which would justify us now in identifying them with the lands named or with any other lands. Some further observations, bearing upon these points, will be found in Appendix B.

the confusion in question was mainly due) have been carefully reproduced; and it is believed that the combination of the two charts has been accomplished as accurately and satisfactorily as is possible. The chart also shows both the real and the supposed routes sailed over by Frobisher on his three voyages in 1576, 1577, and 1578, out of which voyages the misconception now under consideration arose, and in the manner following :

When Frobisher sailed on his first voyage north-westward in the spring of 1576, the Zeno Chart had been published about eighteen years, and we know that not only did he regard it as a genuine and reliable map, but that he sailed either by it or by a chart largely drawn from it. The consequence was that, when, in about lat. 60° , he encountered land, which we now know to have been the southern extremity of Greenland, he imagined that he had reached the southern part of the (non-existent) Zenian island of "Frisland," which was shown in about that latitude on the Zeno Chart. Never for one moment did he identify the land he had reached with Greenland, because he believed that country lay far to the north, in the position in which it was shown on the Zeno Chart.* The fact that the land he had

* This is in no way contradicted by Captain Best's statement (*True Discourse*, 1578, third voyage, p. 10 : see

reached lay considerably to the westward of the position in which Frisland was shown on the Zeno Chart did not strike him—indeed, would not be likely to do so, as he certainly had no accurate means of computing longitude. After leaving “Frisland” (as he called what really was Greenland), Frobisher continued his voyage, sailing a little to the north of west, and discovered and entered the bay on the east coast of America, in lat. 62° , which is still known as Frobisher’s Bay.* He named the adjacent land “Meta Incognita” (a name which still sometimes appears on the maps), and subsequently returned to England.

In the two succeeding years (1577-8), Frobisher revisited his Bay, touching on each occasion at his “Frisland,” without discovering—as, indeed, he had no means whatever of doing—that it was really Greenland. In the first-named year (1577), he also entered (as already mentioned) another bay or deep inlet, rather further south, which he called “the Mistaken Strait,” because he at

also Collinson’s *Three Voyages of Martin Frobisher*, p. 233): “Some are of opinion that [Frisland] . . . is firme lande with the north-east partes of Meta Incognita, or else with Gronelande.”

* Frobisher, at the time of discovering this bay, imagined it, on insufficient evidence, to be a *strait*, with an outlet at its western extremity; but, in order that it may not be confused with a genuine strait, a little further south (Hudson’s Strait), which he afterwards discovered, it will here be spoken of as a *bay*, according to its modern and correct designation.

first mistook it for that he had been in the previous year. He sailed into it far enough to convince himself that it afforded a veritable passage into the Pacific, though, in reality, this was, of course, not the case; for it was, in fact, the remarkable inlet we now call Hudson's Strait.

It must, in this connection, be clearly borne in mind that, although the position of Frobisher's Bay was *afterwards* misunderstood, Frobisher and his companions were, *when they discovered it*, under no misconception as to the fact that it was on the east coast of North America. This is clearly proved by the two maps (Plates V and VI) accompanying the account of Frobisher's voyages, written by Captain George Best in 1578,* which both show Frobisher's Bay (called "Straits") and his "Mistaken Strait" in their correct position on the east coast of America, while Greenland is represented far away to the north, much as shown on the Zeno Chart. †

* *A True Discourse of the late Voyages of Discoverie for finding of a Passage to Cathaya by the North-Weast, under the Conduct of Martin Frobisher, Generall.* By George Best (London, 4to, 1578). The two maps are also reproduced in Collinson's *Three Voyages of Martin Frobisher* (Hakluyt Society, 1867).

† At the first moment, it is true, Frobisher thought he had reached the eastern coast of *Asia*, but he quickly discovered his error. It is clear, moreover, that a certain amount of misunderstanding as to the position of Frobisher's discoveries existed, in some quarters, almost

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These are the two earliest charts showing Frobisher's discoveries in their true position. The next, in point of date, is probably the extremely rare map commonly spoken of as "Lok's Map" (Plate VII), which, though dated 1582 and issued in that year with Hakluyt's *Divers Voyages touching the Discoverie of America* (London, 4°, 1582), was probably drawn several years earlier.*

The fourth map is the Silver Map now under discussion. On it, Frobisher's Bay, though not named, is shown in its true position, the adjacent land being inscribed: *Meta incognita inuenta ab Anglie 1576.*† On both these two last-named charts, the representation of Frobisher's Bay is fairly similar, and the representation of "Frisland" is almost identical. That imaginary land is shown, not as a large island lying (as on the Zeno Chart) in the middle of the Atlantic, but as a wedge-shaped piece of land, with no

from the very first; for, on Dr. Dee's Map (*Cott. MSS., Aug. I. i. 1.*) in the British Museum (which, though dated 1580, really belongs to the autumn of 1578, as proved by the inscription on the back), Frobisher's Strait is shown as intersecting a land lying detached from the eastern coast of America. Whatever the cause of this error may have been, it need not be considered here; for it was certainly different from that under discussion.

* See *post* (p. 38 n).

† "Meta Incognita discovered by the English in 1576." This is the eighth and last of the eight legends spoken of above (see p. 10) as appearing on the Silver Map.

defined northern coast-line, lying immediately south from the Zenian Greenland (Engroland)—of the shape and in the position, that is, of the real Greenland, with which (as stated above) the land Frobisher had mistaken for "Frisland" was really identical.

The fifth map requiring notice in this connection (Plate VIII) is that representing the New World which appeared in Hakluyt's edition (Paris, 8vo, 1587) of Peter Martyr's *De Orbe Novo*, which (as will be mentioned hereafter) bears so close a resemblance to the Silver Map that few will doubt they are by the same hand.

These five maps (of which the Silver Map is one) are, so far as is known, the only published maps of the period showing Frobisher's Bay in its correct position.

A sixth (unpublished) map may also be noticed in this connection. It is drawn on a skin measuring thirty-three inches and a half by twenty-seven inches. Formerly, it was in the possession of the great Lord Burleigh: now, it is preserved among the Cecil Papers at Hatfield. It bears, at the bottom, this inscription: "The first of June 1576. By W: Borough." There can be no doubt that it was prepared by Borough* for the use of

* William Borough was born in Devonshire in 1536. He became eminent as a navigator, cartographer, and

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Martin Frobisher on his first voyage north-westward in 1576. Probably it is either the "very great carte of Navigation," price £5, or one of the "6 cartes of Navigation, written in blacke, [on] parchment, whereof 4 [are] ruled plain & 2 round," price £2, with which Frobisher was provided before his departure.† It is noticeable that, although the chart bears a date two weeks previous to Frobisher's departure from the Thames (which took place on June 15th), it shows, nevertheless, the discoveries made on the voyage. From this, one may infer that the chart was prepared in advance, not as a guide for Frobisher when upon his voyage, but as a semi-blank chart upon which he might plot out the lands discovered or visited upon the voyage. That portion of the chart which indicates the coasts of Europe and the British Isles was, without doubt, drawn in definitely before Frobisher's departure. The same was probably also the case with the names and

writer on nautical matters. In early life, he was associated with the Moscovy Company, and commanded some of the company's ships engaged in the trade with Northern Russia. If he did not actually take part in Frobisher's North-west voyages, he had a large hand in the preparations for them, and is spoken of (Collinson: *Three Voyages of Martin Frobisher*, p. x) as Frobisher's "manne Borrowes." Later, he became connected with the naval service, and died in 1599.

† See Collinson's *Three Voyages of Martin Frobisher*, p. x.

outlines of "Farry Iland," "Podalya," "Yseland," "Westmony," "Frizland," and "Labradore," which (together with one or two names of capes, some almost, one wholly, illegible) are drawn in and named in pencil, but so faintly as to be scarcely discernible. Doubtless, these were regarded as more or less conjectural lands, of doubtful existence and position, which, it was thought, Frobisher might possibly encounter. It is obvious, however, that the representation of Frobisher's "Frisland," marked "*F.I.*" (that is, Greenland), and of his "Bay," must have been drawn in during or after the voyage. This chart (which has never before been reproduced) is given hereafter, in *fac-simile* (Plate IX).*

Clearly, therefore, on the evidence of these six maps and on other evidence, Frobisher and his companions were under no delusions as to the true position of their discoveries. The misconception as to position of those discoveries only arose later, and it came about in this way :

When Davis, in his turn, encountered, in 1585, what we now know to have been the southern point of Greenland, he (for some reason which is not altogether clear) did not identify it, as Frobisher had done, with the "Frisland" of

* Some further details concerning this chart are given in Appendix A (p. 47).

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the Zeno Chart—perhaps because he somehow recognised the difference in longitude between it and the Zenian “Frisland,” or because he was shrewd enough to doubt the real existence of the latter—but called it by a new and (as seemed to him) highly appropriate name, “The Land of Desolation.” Neither did he identify it, any more than Frobisher had done, with Greenland; because, like Frobisher, he imagined that country lay far away to the north, in the position in which it was shown on the Zeno Chart and the other numerous charts drawn therefrom.

In the two succeeding years (1586-7), Davis made the second and third of his three voyages to the huge strait which still bears his name. On both, he sailed on westward (as Frobisher had done) from the land which he himself had called “The Land of Desolation” and Frobisher had ten years before called “Frisland” (but which really was, as we now know, Greenland) until, on the western side of what we now call Davis Strait, he encountered (as Frobisher had also done) the eastern coast of North America. On both voyages, Davis, whilst upon this coast, actually sailed past the mouth of the bay and strait discovered and explored by Frobisher ten years before; but he failed to identify them, as he should have done—at any rate, on his third voyage—as the “Streights” Frobisher had visited. He,

therefore, gave them new names. The former, he called "Lumley's Inlet," after John Lord Lumley, one of the chief promoters of his voyage—a name it retained until, nearly three centuries later, it was ascertained that it was really Frobisher's Bay, after which the latter name was restored to it. The latter (Hudson's Strait, as we now call it), he called the "Furious Overfall," because of the strong current which sets out of its mouth.

It was on his third and last voyage (in 1587) that Davis made the discovery which, viewed in the light of previous misconceptions arising mainly out of the errors of the Zeno Chart, occasioned the confusion now under discussion. On this voyage, he traced the western coast of his "Land of Desolation" northward as far as lat. 73° , which was some six degrees further than was necessary to connect it with the Greenland ("Engroneland") of the Zeno Chart. It was then seen that the two were really one huge land-mass which extended as far south as lat. 60° . It was the tardy recognition of this fact that led to the very extraordinary misconception above alluded to. Geographers assumed that Frobisher really had (as he had supposed at the time), touched at the "Frisland" of the Zeno Chart, the existence of which they accepted; and, when it came to be known that Greenland, though lying further west, really extended as far

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south as the latitude assigned to "Frisland," it seemed clear that Frobisher, in sailing due west from "Frisland," must have reached, not (as he really did) the east coast of America, but the *east coast of Greenland*, which (as they believed) was interposed between the two. Thereupon, either mistrusting or disregarding the evidence of the earlier charts above mentioned, the geographers of the time—that is, of the time immediately after Davis's third voyage in 1587—removed Frobisher's "Strait" on their charts from its real position on the east coast of America to an imaginary position on the east coast of Greenland, showing it as a strait almost, or quite, intersecting Greenland and cutting off its southernmost point! It is so represented on the Mollineux Globe (1592: Plate X*), the Peter Plancius Map (1594), Wytfliet's Maps (1597), the Barentsz. Map (1598), the "New Map" (1600), and on all other maps of the period immediately following Davis's third voyage in 1587; and so it continued to be represented, with minor variations, throughout the Seventeenth and Eighteenth Centuries. Even after the disap-

* This is the first occasion, it is believed, on which any portion of this extremely-interesting Globe has been reproduced. The representation of Frobisher's "Strait" given on it is, generally speaking, the same as that given on the other maps here noticed.

pearance of the imaginary "Frisland" from the charts, geographers, either through lack of knowledge as to how the erroneous location of Frobisher's discoveries had been arrived at or through want of thought, failed to perceive the error under which they laboured, and continued to show this imaginary strait as intersecting the southern part of Greenland. Though it grew by degrees smaller and smaller, as represented on the charts, it was not altogether dropped out until the second quarter of the present century. Soon after that time, the discovery, by Captain C. F. Hall, of actual remains of Frobisher's Expedition in the bay known until then as Lumley's Inlet, proved that that inlet was, in reality, identical with Frobisher's Bay, whereupon the older name was restored to it (as already stated) and the long-enduring delusion as to the true position of Frobisher's discoveries came at last to an end.

This much by way of description of the medallion and of the map it bears. It now remains to endeavour, by studying the details of the map, to ascertain its date and the name of its engraver.*

* In speaking of the "engraver" of the Silver Map, one refers, of course, to the man who sunk the die from which it was struck or prepared the mould from which it was cast; for (as already shown) it was not "engraved" in the ordinary sense.

§ V.—THE DATE OF THE SILVER MAP.

It is not difficult, by studying the details of the Silver Map, to decide, within a little, the date of its execution. Considering the foregoing, no one could suppose it earlier than 1580, the year of Drake's return, even if that date had not appeared incidentally upon it. It can, indeed, hardly be earlier than April 4th 1581, when Drake was knighted by Queen Elizabeth on board the *Golden Hind* at Deptford; for he is spoken of in one of the legends as *Sir Francis Drake* ("D. F. Dra." = *Dominus Franciscus Dracus*). The point to decide is: How much later than this may the medallion be?

Now, it will hardly be disputed that any medallion intended (as this obviously was) to commemorate Drake's voyage would be prepared and issued, almost certainly, within a comparatively short time of its completion—say, some time during the year 1581; and it will appear probable, from what follows, that the medallion in question was actually prepared in that year or, at latest, during the following year.

It will be observed that the map shows no trace of the discoveries of Pet and Jackman around the Island of Waigatz and in the Kara

Sea in the summer of 1580. Had not the map been drawn fairly soon after the return to England of these navigators (which took place on December 26th 1580), it would probably have shown some trace of their discoveries.

In the next place, attention may be called to the extraordinary resemblance (already, in part, alluded to*) between the representation of Frobisher's "Strait" and Frobisher's "Frisland" on the Silver Map and on Michael Lok's map of 1582, which is so great as to argue, more or less, a common origin and an approximately identical date for both.†

The above is, as far as it goes, good evidence that the Silver Map was probably executed in 1581, or not later than 1582. There is also strong evidence that it was almost certainly executed *before* 1585. In that and the two succeeding years, Davis made his three voyages to Davis Strait, which led to the representation of that region being materially altered on the charts of the period.

* See *ante* (p. 29).

† Lok's map was drawn to represent Frobisher's discoveries in 1576-7-8, and therefore probably existed in manuscript before 1582, when Hakluyt published it. The inscription it bears, alluding to Drake's voyage in 1580, does not prove that it may not be of earlier date, for this may have been, and probably was, added at the time of publication. It is, therefore, quite possible that, even if the Silver Map was prepared in 1581, the cartographer who prepared it may have seen Lok's map in manuscript.

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But, on the Silver Map, we find no trace whatever of Davis's discoveries. Again, we find on the Silver Map no suggestion of the circumnavigation of Cavendish in 1586-8—the second English circumnavigation of the Globe. The conclusion is, therefore, irresistible that the Silver Map is of earlier date than these voyages; and, for reasons given above, we may pretty safely assign it to the year 1581.

§ VI.—THE ENGRAVER OF THE SILVER MAP.

It is somewhat more difficult to fix upon the engraver of the Silver Map than to fix its date. It has hitherto been supposed, by Franks and others, to be the work of Joos de Hondt, commonly called Jodocus Hondius, who, although of Dutch birth, was the most eminent cartographer and map-engraver in England at the end of the Sixteenth Century. He was born at Wacken, in Flanders, in 1563, but resided at Ghent till driven away by the siege, coming to London in 1583. He married in London in 1587 and returned to Amsterdam in 1594.

There exists, moreover, a map, undoubtedly engraved by Hondius, which bears a certain general resemblance to the Silver Map. This very rare map is entitled, *Vera Totius Expeditionis Nauticae*, etc., and is

supposed to have been engraved by Hondius, in or about 1595, shortly after his return to Holland. It forms part of a large sheet intended to commemorate the circumnavigations of Drake (1577-80) and Cavendish (1586-8). At the top is the map, in two hemispheres; on either side are portraits of Drake and Cavendish; below is a long description, in Dutch, of their voyages; at the bottom are smaller designs.* In some general respects (as has been said), this map resembles the Silver Map.† The representation of the world is approximately the same, and the routes of both Drake and Cavendish are represented by dotted lines, against which are placed ships in full sail and the words *Exitus* and *Reditus*, exactly as Drake's route is represented on the Silver Map. A very striking point of difference lies, however, in the fact that the two hemispheres are differently divided on the two maps. On the Silver Map, the two hemispheres represent, respectively, the Old World and the New, as

* Of this sheet, which is now extremely scarce, there is a copy in the British Museum (S.T.W., 1).

† The map alone was reproduced by the Hakluyt Society in 1856 (*Drake's World Encompassed* [1626]; edited by W. S. W. Vaux). It was also reproduced, though exceedingly small (each hemisphere being less than an inch and a half in diameter), on several contemporary engraved portraits of Drake; and it, or a very similar map, appears on the title-page of the Eighth Part of De Bry's *America* (Frankfort, 1599).

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is usual ; but, on the other map, the division of the hemispheres runs down the middle of Asia and the middle of America—an unusual arrangement probably adopted by Hondius because it left the Atlantic and Pacific Oceans intact and undivided, and thus enabled him the better to represent the routes of the navigators in question across those oceans.

Nevertheless, it is almost certain that the Silver Map was *not* engraved by Hondius. If its date really is (as seems probable) 1581, it would be necessary, if Hondius engraved it, to suppose that it was engraved by him when no more than eighteen years of age and whilst still resident in Holland. This, of itself, would not be an insuperable objection, for Hondius is said to have commenced to engrave even earlier; but it is improbable in the extreme that, at such an age, he could have produced such a finished work as the Silver Map. There remains, of course, the bare possibility that the Silver Map was not engraved till after 1583, when Hondius was over twenty years of age and residing in London ; but this, again, has been shown to be improbable.

It is almost certain therefore that Hondius did not engrave the Silver Map. There exists, moreover, evidence that it was probably engraved by someone else.

The western hemisphere on the Silver Map bears so close a resemblance to the

exquisitely-engraved little map of the New World and of the Pacific and Atlantic Oceans which accompanies Hakluyt's edition of Peter Martyr's *De Orbe Novo*, issued in Paris in 1587, that one can hardly doubt they were both engraved (as already hinted*) by the same hand, and were either copied from one another or from one common original now probably lost. This map (which measures 204 by 163 mm.) is missing from most copies of the work, and is, in consequence, now exceedingly rare.† It bears the following Dedication :

Doctiss. et ornatiss. Rich. Hakluyto :

F.G.S.

*Cui potius quam tibi Orbem hunc novum dicassem ?
Cum tu assiduis eruditissq' libris tuis ipsum eundem in
dies illustriorem reddas. Eum igitur Vti tua humani-
tate dignum est accipe, teq' nos Vicissim amabimus.*

Paris, Cal. Maij, M. D. LXXXVII.‡

On this Paris map, the geography of the New World, down even to small details, is re-

* See *ante* (p. 30).

† The Grenville copy of Hakluyt's work in the British Museum (G. 6530) contains a fine impression of the map. Nordenskjöld, who gives (*Facsimile Atlas*, 1889, p. 131) a rather poor reproduction, speaks of it as a "handsome map," and cites it as one of several maps of the end of the Sixteenth Century, which, in respect of their beautiful execution, are worthy to be compared with those of Mercator.

‡ To the most learned and accomplished Richard Hakluyt, F[—?] G[—?] S[aluting].—To whom, better than to you, could I dedicate this New World? For it is the one you daily render more illustrious by your exhaustive and learned books. Accept it, therefore, with your accustomed kindness, and we in turn will love you.—Paris, the Kalends [1st] of May 1587.

presented almost exactly as on the Silver Map. On both, "Frisland" and Greenland are shown almost identically; on both, the sea is stippled and the land left plain; and, on both, the same names appear in almost, if not quite, identical form. In fact, *all* the names on the Silver Map (with the single exception, apparently, of the Island of Mocha) appear on the Paris map, though the latter map is able, on account of its larger size, to accommodate also not a few additional names for which there is no room on the former. Even three of the legends already alluded to as appearing on the Silver Map (those relating to Frobisher's discoveries in 1576, Drake's passage of the Strait of Magellan in 1578, and Drake's discovery of "Nova Albion" in 1579, respectively) reappear on the larger map, almost identically (word for word) as on the smaller, even to the error as to the dates contained in the two last-named. Lastly, the style of the lettering throughout is closely identical on both maps. The most striking—and, indeed, almost the only—differences between the two are the absence from the Paris map of the line indicating Drake's route* and of the representation of the Great

* But this would naturally be omitted from a map which was only intended to be a map of the Western Hemisphere, and could, therefore, at best, show only a portion of Drake's route round the world.

Southern Continent — the “*Terra Australis nundum cognita*.” The resemblance, in other respects, is, however, so close that it is impossible to doubt that the two maps were (as stated above) executed by the same hand, and that he was the “F. G.” who signs the Paris map, though who he may have been the writer has been unable to discover, notwithstanding a good deal of inquiry and research.

It seems likely, therefore, that the die or mould for the Silver Map was originally engraved, as was the copper-plate of the other map in question, in Paris.* Looking to the fact that Hakluyt was connected with the appearance of this Paris map of 1587, as well as with that of Lok's map of 1582 (both of which show certain striking points of resemblance to the Silver Map of 1581), there

* It must not, however, in this case, be argued that, because the two maps are closely identical, the undated Silver Map is necessarily of the same date (1587) as the dated Paris map. The Silver Map, if issued (as it probably was) in 1581, or perhaps in 1582, would have been quite correct and up to date, so far as knowledge then went, in representing “Frisland,” Greenland, and Frobisher's “Strait” as it does; but a map issued (as we know the Paris map was) six years later, in May, 1587 (when the general results of Davis's discoveries in the two preceding years must have been known in Paris), would be somewhat behind the latest current knowledge in similarly representing those regions. There is no reason to doubt, therefore, that, though both were drawn from a common original and by the same hand, the Silver Map is the earlier, and belongs to the year assigned to it above.

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seems every probability that Hakluyt (who was, moreover, then living in Paris) had a hand also in the production of the Silver Map, and that to him are due its notable correctness and its perfection as a map. A further argument in favour of the French origin of the Silver Map might, perhaps, be based on the fact that the *lacuna* it shows in the numbering of the degrees of longitude in the Pacific—a very uncommon feature—appears also (as has been shown: see p. 10, *n.*) on two other *mappemondes* of French origin, though of slightly earlier date.*

§ VII.—CONCLUDING REMARKS.

To sum up: the "Silver Map" is an object of interest from several different points of view.

As a medallion merely, it is notable because it is an example of that uncommon kind which, though apparently engraved, is really cast or struck. Moreover, it is at once the

* If the contentions here advanced as to the date and nationality of the medallion are well founded, obviously Mr. Julian S. Corbett is incorrect in describing it (*Drake and the Tudor Navy*, vol. i, p. 273 *n.*) as "a Dutch silver plaque . . . , which appears to have been executed in his honour, possibly on the occasion of his official visit to Holland in 1586."

earliest and the largest example known of this uncommon kind of medallion.

As a map merely, it is remarkable for its beautiful and exact execution, and for the interesting evidence it affords as to the voyages and discoveries of both Drake and Frobisher.

Regarded from a standpoint allowing of a somewhat wider view, this unique and beautiful piece may even be said to be of national interest; for there can be no doubt whatever that it was specially struck as a memorial of the wonderful voyage of Sir Francis Drake—the most famous in our annals—perhaps as a memento or keepsake for those who had promoted or taken part in it; while very probably it was made out of some of the actual silver—said to be twenty-seven tons in all—which Drake brought home.



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APPENDICES.

APPENDIX A.

Note on Frobisher's Chart of 1576, preserved at Hatfield.

THIS interesting Chart, which is alluded to on pages 30 to 32 and has never before been reproduced, is the property of the Marquess of Salisbury. It was first brought into notice in *The Seventh Report of the Royal Historical Manuscripts Commission* (1878, app. i, p. 192), wherein, however, it was erroneously described as by "W. Bordhugh."

Of the four endorsements on the back, two are in Lord Burleigh's handwriting. They are written in two corners, and read, respectively: "1578, Martý furbushers Navigatiõ. 98," and "North West: furbisher's Voyage." The other two endorsements are by a later hand, and both read: "A Sea Carde of S' M'tine furbushers voayadge."

To what has already been said about the Chart in the body of the work, it is not necessary to add very much.

On the original, the coasts of England and Ireland are coloured blue; those of France and the smaller islands adjacent to Britain, red; while those of Scotland, Scandinavia, Greenland, a small island near Greenland, and Frobisher's Bay, are green.

It is not easy to account for the appearance of the small round island just mentioned. It lies east-south-east from the southernmost point of Greenland, and is inked-in and coloured green as though it were firm land, like Greenland itself; but across it is written the word "*ise*." Probably Frobisher and his companions saw, in the position in which it is shown, an unusually large ice-floe, which, after his return home, was indicated in error on the Chart as an island.

Frobisher's Bay, it may be noted, is shown something more than a degree north of its true position.

As regards the lands and names shown in pencil and alluded to on page 32: though these are indicated clearly enough on the accompanying reproduction, some of them are so indistinct on the original that it would be impossible for anyone who had no inkling of their tenor to decipher them. There need be no doubt, however, that they have been correctly rendered.

Of the countries represented by the faint pencil lines, four (namely, the Farö Islands, Iceland, Westmony, and Labrador) were fairly well known at the time, from general sources of information. All (except, perhaps, the last-named) were, in fact, so well known that one wonders why Borrough did not set them down definitely at the outset, without hesitation, as he did the British Isles and Scandinavia. Perhaps, however, the recent publication of the Zeno Chart, with its many new and puzzling features, had raised a doubt in his mind, whether, after all, the countries in question really did occupy the positions in which they had formerly been supposed to lie. The three remaining countries indicated by the faint pencillings (namely, Podalya, Neome, and Frisland) stand in a different category. They are purely Zenian in their origin, and have been taken bodily from the Zeno Chart. They have been copied from that chart correctly enough as regards shape, but somewhat incorrectly as regards position, all of them having been moved, in varying degrees, further south than the positions assigned to them on the Zeno Chart.

The faint pencillings on the Chart also include the names of four capes. As these names are appended to coasts visited by Frobisher and indicated in colour on the Chart, they were probably added to the Chart *after* the voyage—not (as we have supposed to be the case with the other pencillings) *before* it. The first of these names (Cape de Terra Firme) is applied to the cape we now call Cape Farewell. This cape is commonly so named on the early Portuguese Charts which showed Greenland (or Labrador, as many of them called it) from about 1505 to 1540. Indeed, the cape had no other designation, except the more modern Zenian name of Trin Promontory, until Davis, in 1585, named it Cape Farewell. The second (Cape Fredo) is also appended to the coast of Greenland. The name is placed on the west coast, in about lat. 63°, and is of obscure origin. The other two names are placed near the entrance to Frobisher's Bay, one on the north side, the other on the south. That appended to the cape on the south of the entrance may be just deciphered as Queen's Foreland—the name Frobisher bestowed upon it. That on the north is illegible, but is probably North Foreland, the name Frobisher gave to the cape against which the name is written.

There are also on the Chart five arrows which indicate the result of observations on the amount of variation of the magnetic needle made by Frobisher at as many different points on his route. These form almost, if not quite, the

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earliest series of precise observations on the amount of variation of the compass on record. Robert Norman's *New Attractive*, to which was appended William Borough's *Discours of the Variation of the Magneticall Needle*, was published in London in 1581, and these two works together form the earliest systematic treatise on the subject of Magnetic Variation. Norman states emphatically (p. 21) that the amount of variation in different places was, not regular, but irregular—"in some places swift and "sudden and in some places slow"—a fact which had been overlooked, he says, by previous writers on the subject. "For [he says, in proof of his statement], in goyng from "Silly to Newfoundland, which is not 600 Legues, it is "found that the needle doth vary more in 200 Legues when "you come neere that Countrey then it doeth in 400 "Legues of your first waie. And, also, goyng to *Mela Incognita*, it varieth more in $\frac{1}{3}$ parte of the last of the way "then in $\frac{2}{3}$ of the first; and in those partes is found to be "sudden." This proves that Norman was familiar with the result of these observations made by Frobisher. It is not improbable that it was largely they which led Borough to undertake the series of observations by means of which, in October, 1580, he demonstrated for the first time the amount of the Magnetic Variation at London.

In the *Dictionary of National Biography* (Art. Frobisher), the Chart in question is spoken of in error as illustrating Frobisher's last north-west voyage, made in 1578.

APPENDIX B.

Note on the Zeno Narrative and Chart of 1558.

FOR more than three centuries, no question has been the subject of such frequent and heated discussion among geographers, cartographers, and historians of geography, or has appeared so hopeless of final solution, as that which has been called "The Zeno Question"—the question (that is) as to the authenticity or otherwise of the narrative and chart of the reputed voyages to the North Atlantic, at the end of the Fourteenth Century, of the brothers Nicolo and Antonio Zeno, of Venice, which narrative and chart were published at Venice in 1558.

Mr. F. W. Lucas, in his splendid work already alluded to,* has now shown, beyond (in my opinion) the possibility

* See *ante*, page 23.

of further doubt, that the Zeno Narrative and its accompanying Chart cannot be, and never ought to have been, regarded as a source of genuine and reliable history or cartography. He has, indeed, successfully maintained (as I consider) that the Narrative is, at best, little, if anything, more than a fraudulent concoction; while the Chart, even if not a similarly-fraudulent concoction (as Mr. Lucas maintains), contains errors which render it largely valueless as a cartographic guide.

Taken as a whole, therefore, the mischievous "Zeno Question" may now be regarded as finally disposed of.

Nevertheless, it seems to me still permissible, without in any way belittling the results of Mr. Lucas's researches, to consider the question:—Is it not possible that both the Zeno Story (even though, in the main, obviously fraudulent) and the Zeno Chart (even in spite of its many and manifest errors) may each have had some real basis in fact—have been based (that is) on real documents, however imperfect; and, if so, to what extent in the case of each?

This particular point is of minor and (in the main) of merely academic interest; but, in view of the amount of attention lately directed to the Zeno Story, largely in consequence of the appearance of Mr. Lucas's book, it seems worth while to devote some space here to a discussion of the point, especially as Mr. Lucas has not (as it appears to me) given it quite adequate consideration.

It may be pointed out, in the first place, that there is nothing whatever inherently improbable in the statement that the brothers Nicolo and Antonio Zeno, of Venice, voyaged to the Northern Seas and there underwent shipwreck and other adventures at the end of the Fourteenth Century. It is, therefore, in no way inherently improbable that, one hundred and fifty years later, there were (as stated), in the possession of their descendants in Venice, documents describing their adventures and a rotten and imperfect old Chart portraying the region visited. Mr. Lucas himself admits all this freely enough.*

The point to consider is whether, as a matter of fact, such records did form (as stated) a basis for the Zeno Story as published, and whether such an old chart actually did form (as stated) the groundwork of the Zeno Chart as we have it. Mr. Lucas maintains positively† that such was not

* See his *Annals of the Voyages of the Brothers Nicolo and Antonio Zeno*, p. 156.

† *Annals*, p. 156.

the case ; but his reasons for so thinking do not appear to me altogether conclusive, especially in the case of the Chart. It is, at all times, more or less difficult to establish a negative ; and to show that the Zeno Story consists, for the most part, of material fraudulently thrown together and concocted, and that the Zeno Chart contains manifest falsities does not prove (as Mr. Lucas seems to assume) that either the Narrative or the Chart, or both, may not have had as a basis (though, perhaps, only to a small extent) some real and genuine documents. It is certainly unfortunate that none such should have been preserved ; but the fact that none now exist is scarcely proof (as Mr. Lucas seems to urge*) that none such ever existed. Of how many narratives of the kind, genuine or fraudulent, published at the period could the original manuscripts now be produced ? Probably not one in a hundred.

As regards the Narrative there is not very much to be said in this connection. It is almost wholly a fraudulent compilation, as Mr. Lucas has made obvious enough. He has so turned it inside out, has exposed its many incongruous absurdities, has traced not a few of the incidents introduced into it to their original sources, and has generally directed against it such an overwhelming flood of destructive criticism that (as seems to me) it can no longer be regarded by anyone as a reliable historical document, and must be looked upon almost wholly as a work of fiction. At the same time, Mr. Lucas has advanced (so far as I can see) no fact or argument proving that it was not "founded upon fact," like many another work of fiction. To me, it seems inherently probable that it was so. It appears hardly likely that the younger Nicolo Zeno, a man of high standing and good-repute in Venice, would have gone the length of concocting such a narrative altogether *ab initio*, notwithstanding the undeniable fact that he did not hesitate to "cook" very extensively whatever genuine original matter he may have had.

Of the Zeno Chart, there is much more to be said. The conclusions at which Mr. Lucas arrives in respect of it seem to me far less satisfactory than those at which he arrives in reference to the Narrative. He appears not to have looked at the Chart as closely as he might have done from the point of view of the critical student of comparative carto-

* See *Annals*, p. 154.

graphy and not to have made sufficient allowance for the fact that, however obviously fraudulent the Narrative may be, the Chart is not necessarily the same. The two should be considered, in fact, separately, each upon its own merits. That the Chart contains many very extraordinary errors, which appear at first sight as if they must have been fraudulently introduced, is undeniable; but, looked at more closely, these very errors will be found to afford some evidence that the Chart was based, not improbably, upon some real and authentic cartographic documents of earlier date, and that the errors had been introduced into it (partly, at least) through unfortunate misconception rather than deliberate fraud.

In considering the authenticity or otherwise of the Zeno Chart, we may, in the first place, take account of the fact that, of the many writers who have concocted wholly-bogus books of travel, intended to deceive, comparatively few have also concocted *maps* intended to elucidate their bogus narratives. Among the various writers of this class cited by Mr. Lucas,* only one, I believe, did so, namely, Maldonado. It is not difficult to discover the chief reason for this almost unanimous abstention on the part of these fraudulent writers of bogus stories of travel. A picturesque and plausible tale of travel and adventure is comparatively easy to conceive; but, for obvious reasons, a commonplace, matter-of-fact document, such as a map, is much less easy to concoct in anything like a convincing form. Moreover, a bogus map, however plausible it may appear at a glance, is far more easily proved to be fraudulent by means of subsequent research and experience than is the case with a bogus narrative. The Zenian Narrative is, then, almost unique among fraudulent narratives of travel in that it is accompanied by a large and detailed Chart of the whole of the extensive region to which the Narrative relates. Moreover, that map contains features which, however derived, are (as I trust what follows will show) of some cartographic interest.

In the second place, one may notice the fact that there seems to be comparatively little connection between the Zeno Narrative and the Zeno Chart. As Mr. Lucas says,† "the two documents cannot, by any means, be made to correspond." The Chart, though of good size and exhibiting much detail, illustrates the narrative only to a small extent. It does not represent the routes

* *Annals*, p. 147.

† *Ibid.*, p. 98.

followed on the reputed Zeno voyages, and the names it bears often differ more or less in form from the same names in the Narrative. The Chart bears, moreover, no less than one hundred and fifty place-names, of which only some twenty or so appear in the Narrative. It should be observed, too, that the younger Nicolo Zeno does not himself claim that the rotten old chart he says he possessed had any direct connection with the reputed voyages of his ancestors to the North Atlantic. He merely speaks of it* as "a navigating chart which I once found that I possessed among the ancient things in our house." He does not in any way assert that it had ever belonged to Nicolo and Antonio Zeno, the reputed explorers, and he mentions it in an entirely different part of his work from that in which he tells us how he became possessed of the letters from which he claims to have derived his Narrative. In the same place, he tells us frankly that, as the chart was "all rotten and many years old," he had attempted "to draw out a copy of" it, in order that it might serve to make intelligible the Narrative which, without it, would not be so easily comprehensible, and he complacently declares his belief that he had "succeeded in doing [this] tolerably well." That he did not attempt to conceal the fact that he had, to some extent, *restored* the map is clear from this admission and from a subsequent reference to the chart,† in which he speaks of it as "the map made by me." This, so far as it goes, is in favour of his *bonâ fides*, at least so far as the Chart is concerned.

That the Chart really is, to some extent, at least, a compilation, fraudulent or honest, admits of no manner of doubt; for, as will be shown hereafter, it exhibits, in different parts, cartographic material belonging to different periods.

On the whole, it appears to me that the Zeno Chart possesses many more evidences of authenticity than does the Narrative. The fact that some of its more prominent features are to be found on certain earlier charts hardly proves (as Mr. Lucas seems to urge)‡ that it is, on that account, *necessarily* a fraudulent concoction. Nor does the fact (of which Mr. Lucas makes much§) that intelligible names appearing on earlier charts appear on the Zeno Chart in forms so corrupted as to be almost unintelligible, prove (as Mr. Lucas argues) that the Zeno Chart is there-

* See Lucas's *Annals*, p. 8.

† *Ibid.*, pp. 98-101.

‡ *Ibid.*, p. 15.

§ *Ibid.*, pp. 104, 105, 153, etc.

fore necessarily fraudulent. We must remember that many of the earlier charts in question were *in manuscript*, and probably, therefore, more or less illegible and indistinct, even when newly drawn; while the inevitable defacements due to age would certainly render them still less distinct. It is easy enough, even now, to misread unfamiliar proper names written in modern manuscript, with the characters of which we are familiar; and it was almost inevitable that, in the careless days of four hundred years ago, errors should have arisen in the transcription of unfamiliar proper names, written in unfamiliar characters and in a foreign language, on old and more or less defaced manuscript charts. It is certain that any Englishman, Frenchman, or German who, in 1558, had attempted, without especial care, to transcribe the names appearing (for instance) in Portuguese on the La Cosa Chart of 1500, would inevitably have committed many grotesque errors. There is scarcely an engraved chart of the first three quarters of the Sixteenth Century which does not exhibit many errors due to this mis-transcription from the more or less illegible manuscript charts of the preceding century. The well-known Cabot World-map of 1544 affords many good examples. The corruption of the names appearing on the Zeno Chart cannot, therefore, be accepted as conclusive evidence of its being merely a fraudulent concoction.

Let us next examine the Zeno Chart in some of its more prominent details.

To me, it seems that the most striking feature on the Chart is its very great errors as regards latitude—a matter Mr. Lucas has done little more than notice.* There are six countries shown upon it which are readily identifiable at a glance, and all are represented *much too far north*. Thus, the northern extremity of Scocia (Scotland) is placed about two degrees too far north; Islanda (Iceland), about four degrees too far north; Estland (Shetland), about four degrees and a half too far north; while Dania (Denmark), Norvegia (Norway), and Engroneland (Greenland) are all three placed about six degrees too far north.

These remarkable errors in latitude stand on a footing entirely different from the errors in *longitude* which the Chart (in common with all charts of the period) also displays, as already stated.† It may, however, be pointed out that on not a few charts of the middle of the Fifteenth

* *Annals*, pp. 116 and 117.

† See *ante*, p. 25.

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Designed by J
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CHRISTY: "The Silver Map of the World" (London: Henry Stevens, Son & Stiles. 1899)



Designed by Miller Christy

CHART OF THE NORTH ATLANTIC, WITH THE ZENO CHART OF 1558 SUPERIMPOSED
OF ADJUSTING ITS ERRONEOUS LATITUDE

Real Geography in black

Latitude in grey



CHART OF 1558 SUPERIMPOSED THEREON, SHOWING THE RESULT
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From Geography, 1899.

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Century* (on which Greenland must have been shown wholly according to Scandinavian tradition, rather than as a result of more recent exploration, for no more recent exploration had then been made), Greenland is similarly given a much-too-northerly position. This was probably due, in a large degree, to some error in observation arising out of ignorance as to the amount of magnetic variation in the north-western portion of the Atlantic; and a suggestion why a too-northerly position is assigned to Greenland on the Zeno Chart is made hereafter. The too-northerly position of Denmark, Norway, Shetland, Scotland and Iceland on the same Chart is less easy of explanation, but is probably due, in some way, to the same cause. *

It is worthy of note that, if we correct these obvious errors in the latitudes of these identifiable lands and slightly alter their longitudes (as has been done on the diagrammatic chart facing p. 54), we get a Chart of the North Atlantic which is, in most essential respects, astonishingly correct—Dania, Norvegia, Estland, Scotia, Islanda, and Engroneland all falling into their correct positions. This fact will be again alluded to.

Thus far the identifiable lands shown on the Zeno Chart. It remains to be seen how rectification of latitudes and longitudes helps us to identify the other lands (all islands, with one exception) shown thereon which are *not* readily identifiable at a glance. These latter are seven in number—namely, Estotiland, Drogeo, Podanda, Neome, Icaria, the group of seven islands shown off the north-eastern extremity of Iceland, and Frislanda. If the lands which are readily identifiable at a glance are certainly placed too far north, it is reasonable to assume that these other lands which are not readily identifiable at first sight may also be placed similarly too far north.

Let us take, first, Estotiland and Drogeo. Both are shown actually on the margin of the Chart, and it is, therefore, difficult to decide whether they are intended to represent mainland or island; but, according to the narrative, the former represents mainland: the latter, an island. If we assume that both are placed, like the land nearest to them (Greenland), six degrees too far north, and if we move both that distance southward, as well as a little westward, both

* See, for instance, the Zamoiski Chart (about 1467), the map of the North in the Donis Ptolemy (1482: both reproduced among the charts at the end of Mr. Lucas's book), and the three "Florence Maps," belonging to the Fifteenth Century, to which Mr. Lucas alludes (*Annals*, p. 100).

fall into the position of certain lands which it is possible they were intended to represent. Thus, Estotiland falls exactly into the position of the most easterly point of Labrador (that portion around the Bay of Chasteaux and Cape Lewis); Drogeo falls into the exact position of the northern extremity of Newfoundland (namely the portion around Cape Bauld and Pistolet Bay); while the Strait between Estotiland and Drogeo comes to represent, apparently, the Strait of Belle Isle.

This solution accords very well with the identification of these two lands (Estotiland and Drogeo), suggested by Mr. Lucas*—namely, that they represent portions of the coastline of Labrador and Newfoundland, discovered on the Cortereal voyages of 1500-2, and shown as islands, called "Terra Corterealis," lying in the middle of the Atlantic, on various Portuguese charts of the period.† If Mr. Lucas's identification is correct (as it may very well be), it would, of course, be certain that this portion of the Zeno Chart, at least, was certainly not as old as the date of the reputed Zeno voyages; but this fact, even if demonstrated beyond doubt, would not necessarily prove the falsity of the whole Zeno Chart; for the features in question may have been among those which Zeno admits he added to his rotten old map.

Moreover, there is another possibility upon which one may account for the appearance on the Zeno Chart of these portions of the coastline of Labrador and Newfoundland. If the type of Greenland shown on the Zeno Chart is probably (as will be shown hereafter) pre-Cabotian, and an interesting cartographic relic of the early Scandinavian explorations of that country, these representations of scraps of the adjacent coastline of Labrador and Newfoundland may be so also; for we now know beyond doubt (though the fact was for centuries lost sight of) that the early Scandinavian voyagers were perfectly familiar with that coastline. The cartographic representation of a portion of it which we find upon the Zeno Chart may, therefore, have been derived (as I believe the representation of Greenland on the same chart to have been) from some ancient chart (probably Scandinavian) now lost.

As to Podanda,‡ Neome, and Icaria: it is almost

* *Annals*, p. 121.

† See, for instance, the Cantino Map of 1502, the "King Map" of 1502 (now in the possession of Dr. E. T. Hamy, of Paris), the Caniero Map of 1503, and the Portuguese Chart reproduced by Kunstmann (Taf. ii.).

‡ The *Portland* of the Narrative.

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useless to speculate as to what real islands these Zenian islands may have been intended to represent. The early charts of the North Atlantic were crowded with a bewildering variety of small islands (some wholly fabulous and non-existent: some real islands confused with others or misplaced); and the three Zenian islands in question may represent some of these, if they really represent anything. If we assume that they (like Denmark, Norway, and Greenland) are placed on the Zeno Chart some six degrees north of the position in which they should have been placed, and if we move them accordingly that much further south, or rather more, we find that Podanda and Neome might represent, with tolerable accuracy, the real islands of St. Kilda and Rockall, lying to the west of Scotland; whilst Icaria (which Mr. Lucas identifies with St. Kilda) might very well stand for one or other of the fabulous islands of St. Brandan and Brazil, which appeared on nearly all Charts of the North Atlantic during the Fourteenth and Fifteenth Centuries. This is, however, pure guess work, and does not account for their names, which are exceedingly perplexing.*

We will take next the seven islands (named Mimant, Bres, Talas, Danbert,† Brons,‡ Iscant, and Trans) lying adjacent to Iceland. Mr. Lucas has shown beyond reasonable doubt§ that these represent the Shetland Islands, of which the chief are about seven in number, including (in the order given above) Mainland, Bressay, Yell, Hamna, East and West Burras, Unst, and St. Ronan's. They are, however, shown about nine degrees north of the true position of Shetland, and have become mixed up with Iceland. As Estland also appears on the Zeno Chart and also unquestionably represents the Shetland Islands, those islands appear *in duplicate* on the Chart. It may be worth while to inquire how this can have arisen. Mr. Lucas believes|| that the younger Nicolo Zeno, concocting his Chart from various earlier charts, took his Iceland from the Olaus Magnus Map of 1539, upon which a number of large ice-floes are represented as being massed off the north-eastern coast of Iceland, and Mr. Lucas expresses his belief that Zeno converted these ice-floes into the seven islands in

* As to the source from which Zeno derived the *names* of these islands, as well as those of Estotiland and Drogeo, I am unable to make any suggestions more plausible than those put forward by Mr. Lucas (*Annals*, pp. 122-124).

† *Danbert* in the Narrative.

§ *Annals*, p. 102.

‡ *Brons* in the Narrative.

|| See *Annals*, p. 102.

question. But this suggestion is not adequate to explain all that requires explanation. Even granting (for the sake of argument) that such was the origin of the islands in question, we are still without any explanation as to why Zeno gave to these imaginary islands (or ice floes) names which clearly belong to the Shetland Islands, or why he also showed the Shetlands a second time, further south, in their correct position (at least, relatively to the countries most nearly adjacent to them). There is, however, a passage in the Zeno Narrative which, if carefully examined, seems to throw some light on the matter. It is related* that Zichmni, Prince of Frislanda, having given Nicolo Zeno command of his fleet, accompanied him in an attack on Estlanda (Shetland). They commenced the attack, but, hearing that a powerful fleet belonging to the King of Norway was coming against them, they sailed away towards Islanda (Iceland), which they also attacked. Being, however, repulsed (their fleet having been much weakened and reduced by a storm), and hearing that the Norwegian fleet had been totally destroyed in the same storm, they "attended that enterprise [*i.e.*, the attack on Islanda], without having done anything, *and attacked, in the same channels, the other islands, called Islande, which are seven in number*, that is to say, Talas, Broas, &c."; which islands they captured. This passage, as it stands, is obviously confused nonsense, as both Major and Lucas have pointed out. There is clearly something wrong in the statement that Zichmni and Nicolo Zeno, after being repulsed from Iceland ("Islanda"), at once attacked a group of seven islands, *being immediately adjacent to Iceland, and also called Iceland* ("Islande"), though bearing individually seven different names. Yet this is what the Narrative declares they did. There can be little doubt that the word "Islande" in this passage should be "Estland" (meaning Shetland), it being very easy to confuse the two, either by a clerical error or a misprint.† At all events, the passage makes good sense if "Islande" is here read as "Estland." It then comes to mean that Zichmni and Nicolo Zeno, after having been repulsed from Iceland, and having heard of the destruction of the Norwegian fleet, *returned to their attack on the Shetlands*—a perfectly intelligible proceeding

* See Lucas's *Annals*, p. 11.

† Major pointed this out (*Voyages of the Zeni*, p. 119) as long ago as 1874, but Mr. Lucas appears (*Annals*, p. 119) to reject his view. It may be noticed that, in the title of the Zeno book, there occurs the name "Islanda," which is undoubtedly intended for either "Islanda" (Iceland) or "Estlanda" (Shetland), thus showing how easily the two names may be confounded.

on their part, under the circumstances, for they had originally set out to attack those islands, not Iceland, but had been led to abandon their original plan owing to the approach of a superior fleet belonging to the King of Norway. The only fault that can be found with the passage after this amendment is that it conveys a false impression as to the nearness of the Shetlands to Iceland. This must have crept in unintentionally. In explanation of the whole muddle, the following suggestion may be made: That the younger Nicolo Zeno really possessed (as he claims to have done) certain fragments of his ancestors' letters; that he found in them the foregoing passage, which he failed to understand, partly because the word "Eslande" was in one place therein written for "Islande" (or, perhaps, he misread it as such), and partly because the Narrative (perhaps on account of incompleteness) appeared to imply that this "Islande" (really "Estland" or Shetland) was immediately adjacent to "Islanda" (Iceland). Thereupon, finding nothing on his "rotten old map" to correspond therewith, and failing to perceive that the seven islands mentioned in his Narrative were really identical, not with Iceland or with any part thereof, but with the Shetlands, much further south, he added the seven islands to Iceland in his amended copy of his rotten old chart, whereby he made the Zeno Chart, as we have it, correspond (as he thought) with the Narrative. This is, at least, a possible explanation of a matter which obviously requires elucidation. The mixing up of the Shetlands with Iceland is not likely to have been done intentionally by the younger Nicolo Zeno, for it is impossible to see any way in which such a jumbling up of different countries could have served his purpose, whether his purpose was honest or fraudulent. The confusion must, therefore, almost certainly have been the result of some misunderstanding on his part. The very fact that he should have laboured under a misunderstanding of the kind seems, in itself, of some value as evidence that he really had (as already argued) some genuine documents, however imperfect, upon which he built his story.

Among the Zenian lands which are not readily identifiable at first sight, there now remains only Frisland for consideration. No feature of the Zeno Chart has occasioned more perplexity and confusion than the representation of this mysterious island. Mr. Lucas has, however, been able to show that it represents—in the main, at least—Iceland: *not* the Faroes, as has been commonly supposed hitherto, though it bears a few names which are unquestionably of Farenian origin. Iceland is, therefore, like Shetland,

represented on the Zeno Chart in duplicate. The only affinity with the Faroes lies in the few names (seven in number) mentioned above and in the position of the island, its southernmost point lying almost exactly in the position of the southernmost point of the Faroes (namely $61^{\circ} 20' N.$). In every other respect, Frislanda resembles Iceland far more closely than the Faroes.

In connection with the Zenian Frisland, there remains, however, so much that is perplexing that one despairs of elucidation. The name first appears in written history (so far as is known) in the Zeno Narrative; but the island therein described in no way accords with the island represented on the Zeno Chart under the name of Frisland. As to the cartographic origin of the latter, there is not much doubt; for it appears to be identical, in size, shape, and position, with an island shown on various charts of the middle of the Sixteenth Century to which Mr. Lucas directs attention.* This island is called "Fixlanda" or "Frixlanda," and bears most of the names found on the Zenian Frisland; but its cartographical history is long and exceedingly obscure; and, on the charts in question, it may have been originally intended to represent either Shetland, the Faroes, Iceland, or a combination of any or all of them.

Look as one will at the Zenian Frisland, one can only come to the conclusion that here, at least, we have clear evidence, both in the Narrative and the Chart, of the younger Nicolo Zeno's dishonest "cooking" of his materials.

I have endeavoured, in the foregoing pages, to point out that many of the perplexing features of the Zeno Chart may, apparently, be made clearer by an adjustment of the remarkably-incorrect indications of latitude given on the Chart; but I do not assert that these errors in latitude are all that requires explanation in connection with the Chart. So far as what I have called the "identifiable lands" are concerned, this may be the case; but, with the other (not readily identifiable) lands, it is certainly not so. As has already been shown, something further is necessary in order to account for the combination of the Shetlands with Iceland and for the appearance and position of Frislanda and other islands.† The errors in

* *Annals*, p. 117.

† Another perplexing feature (not otherwise discussed herein) is the so-called Monastery of St. Thomas—"S. Tomas Zenobium," as it is called on the Chart (the Latin word *zenobium* having been thus corrupted with obvious intent). This seems incapable of being explained on any supposition, other than that of its having been fraudulently introduced into the Chart to make it accord with the Narrative.

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latitude undoubtedly account for many of the features of the Chart which are, at first sight, perplexing and incomprehensible; but we shall be wise not to attempt to elucidate too much by correcting them. As a matter of fact, the Chart of the North Atlantic which we find we have got after correcting, in the manner indicated above, the obvious errors in the indications of latitude given on the Zeno Chart (as has been done on the chart facing page 54) is so remarkably correct, and has such a surprising resemblance to a modern chart, that one instinctively regards it with some distrust; for it is practically certain that no equally-correct chart of the North Atlantic existed, either at the time of the reputed Zeno voyages (about 1390) or at the time of publication of the Zeno Chart (1558). It is only necessary to compare the Zeno Chart, thus corrected, with other well-known charts of the immediately-preceding period* to see the great and suspicious superiority of the Zeno Chart when thus amended. Without doubt, therefore, the surprising correctness of the Zeno Chart when so treated is, to some extent (though probably not altogether) accidental.

The foregoing facts seem to suggest that (however fraudulent the Zenian *Narrative* may be) there is comparatively little that is necessarily and intentionally fraudulent in the *Zeno Chart*, and to support the younger Nicolo Zeno's statement† that there really was in his possession, in 1558 (as he claims there was) an old, rotten, and mutilated Chart of the North Atlantic. In short, among the many perplexing features we find on the Zeno Chart, I am able to see comparatively few which *might* not have been introduced (it may be quite innocently and as a result of ignorance) by the younger Nicolo Zeno when, in 1558, he made the attempt, of which he tells us, to restore the imperfections of a rotten old map, drawn, perhaps, one hundred and fifty years earlier, and not necessarily connected in any way with the reputed voyages of his ancestors.

Leaving now the question of the incorrect latitudes on the Zeno Chart, let us direct attention to another remarkable feature to which attention has not hitherto been called.

There are apparent on the *face* of the Chart (as has been hinted already: see p. 56) reasons for regarding a portion, at least, of it as belonging to a type at least a century earlier than the date of its publication; and this view in itself, if it

* For instance, with the Olaus Magnus Map of 1539, the three Desceliers Charts of 1536, 1546, and 1550, or the Mercator Chart of 1554.

† See Lucas's *Annals*, p. 8.

can be maintained, affords some evidence of the initial genuineness (if one may coin such a term) of the Chart—or, rather, of the materials from which it was admittedly compiled.

The too-northerly position of Greenland is (as has been said) a feature which appears commonly on maps of the mid-Fifteenth Century; but it is not a feature which is characteristic of the Charts of the mid-Sixteenth Century, when the Zeno Chart was published, though it may appear on some Charts of that period. It can hardly be argued that these remarkable errors in latitude were introduced by the younger Nicolo Zeno for purposes of deception; for it is hardly possible to conceive any way in which such a manifest error could serve the end he had in view, whether we suppose that end was deception pure and simple or not.

Still more significant in this connection is the comparatively-correct *shape and delineation* of Greenland, which, also, are features much more characteristic of the Charts belonging to the mid-Fifteenth Century than of any belonging to the mid-Sixteenth, when the Zeno Chart was published. Looked at from any point of view, indeed, the comparatively-correct delineation of Greenland is (however derived) a very remarkable feature of the Zeno Chart—a feature to which Mr. Lucas has devoted, I think, far too little attention. It is practically certain that, in 1558, the younger Nicolo Zeno could not have derived the type of Greenland shown on his Chart from any other chart which had then been recently published; for we have no trace of any chart belonging to the first half of the Sixteenth Century from which it, or anything like it, could have been copied. The Zenian Greenland has scarcely a feature in common with the various more-or-less-incorrect representations of that country appearing on the maps of the period. As a matter of fact, by the beginning of the Sixteenth Century, geographers had almost wholly forgotten the early Scandinavian explorations of Greenland, and did not possess such a knowledge of that country as would have enabled them to give anything like such a correct delineation of it as that found on the Zeno Chart. There had been, it is true, within the period named, a certain amount of exploration of the Greenland coasts; for the Cortereals and some others of the very earliest post-Cabotian voyagers in the North Atlantic (probably Portuguese or French fishermen) visited its shores. Of their voyages we have little or no historical record; but, in such maps as the Cantino Chart of 1502 and the well-known Portuguese Chart commonly ascribed to the year 1504, we have the clearest cartographical

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evidence that these voyages were actually made, and that the shores of Greenland were visited upon them. That the type of Greenland found on the Zeno Chart was not derived from any of these charts will, however, be clear at a glance to anyone who compares it with the type of Greenland shown on them.*

Yet it is futile to suppose that Zeno *imagined* the delineation of Greenland found upon his Chart; for no representation of the country evolved purely from his own brain could, by any possibility, have turned out so nearly like a representation of the real Greenland as that he gives on his Chart. We are bound, therefore, to seek for some definite cartographic original from which Zeno may have derived his delineation of Greenland. To find a type of Greenland in any way closely resembling that on the Zeno Chart, it is necessary to go back to the *Fifteenth Century—to pre-Cabotian days*—when Greenland can only have been represented on the charts as a result of the early Scandinavian intercourse with that country in the Eleventh, Twelfth, Thirteenth, and Fourteenth Centuries; for, in the Fifteenth Century, there had been no later explorations of, or intercourse with, Greenland. It is to this period (as I hold) that the type of Greenland shown on the Zeno Chart belongs. In respect of Greenland, the Zeno Chart approaches more nearly to the Zamolski Chart of about the year 1467, and the three "Florence Maps" of about the same date noticed by Mr. Lucas† than to any other known charts of earlier date than itself. These are the Charts from which (according to Mr. Lucas‡) the Greenland of the Zeno Chart was largely derived. Mr. Lucas apparently arrived at his conclusions on this point mainly on the evidence of the *names*. He shows§ that, with few exceptions, the same names (allowing for corruptions) appear on Greenland on all four maps, and that all the names on the Zeno Chart (with two exceptions—Trin Prom. and St. Thomas Zenobium) appear on one or other of the four—generally on all. But surely this does not necessarily prove (as Mr. Lucas contends) that the Greenland of the Zeno Chart was copied from one or other or any or all of the charts indicated, though it undoubtedly proves what may be called a cartographical affinity. Moreover, Mr. Lucas has failed to notice the fact that *the*

* As a matter of fact, these discoveries in Greenland were very soon almost wholly forgotten, and many of the charts of forty or fifty years later show no trace of them, or even of Greenland itself.

† *Annals*, p. 100. ‡ *Ibid.*, p. 101. § *Ibid.*, Appendix iv.

Zenian delineation of Greenland is more detailed and more like the actual Greenland than that on any of the four other charts in question. Clearly, therefore, it cannot have been derived from them, or from any of them. Excepting the land-connection with Europe and the too-northerly latitude, there is comparatively little to find fault with in the Zenian delineation of Greenland. The general shape of the country, the general trend north-easterly and south-westerly,* the extremely mountainous interior, the many narrow fiords on the west coast, the belting of islands a little distance from the shore, the low lands (on which were situated the early Scandinavian settlements) on the west coast about Godthaab and Holsteinborg, the projecting mountain-spurs which break up these lowlands and reach the coast in places—all are shown with really wonderful precision when all is considered. We may even identify without hesitation Disko Bay and the bay and islands of Scoresby Land; while various other capes, bays, and fiords are also identifiable without much doubt.

If this striking type of Greenland is (as I contend) pre-Cabotian, it follows that that type must represent (as already hinted) the ancient Scandinavian knowledge of Greenland; and, if this Zenian delineation of Greenland is obviously more correct and detailed than any other known pre-Cabotian delineation (as I maintain it is) we are entitled to assume that this is probably because it is *earlier* and belongs to a period when the Scandinavian knowledge of Greenland was fresher and more accurate than it was at the later period when the other less correct and less detailed charts of Greenland named were drawn. Such I believe to be the case. If so, the Zenian delineation of Greenland may be said to be the best and earliest cartographic representation we have of the results of the early Scandinavian explorations of Greenland; for no contemporary Scandinavian chart representing the results of those explorations is known to have come down to our time.

So far, then, as Greenland is concerned, one is entitled to hold that Mr. Lucas is wrong in claiming† to have shown the source of "every detail" of the Zeno Chart, and that Zahrtman, Major,‡ and others were right in declaring that the Zenian delineation of Greenland was most surprisingly

* The general trend of the country is not quite correct, it is true, being rather too much east and west; but there are few charts of earlier date on which the general trend is more correctly represented.

† See *Annals*, p. 155.

‡ See Major's *Voyages of the Zeni*, p. lxxxvii.

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correct for the period when it was published, though both were alike at fault in their surmises as to the source whence this remarkable accuracy was derived.*

It may be urged, of course, that, if the younger Nicolo Zeno had essayed, in 1558, to concoct, *de novo*, from earlier charts, a purely fraudulent chart, without any such basis as that he said he had in the "rotten old map" of which he speaks, he would naturally, for the sake of plausibility, as he desired the chart to illustrate a narrative claiming to be over one hundred and fifty years old, have selected cartographic material equally old; and that the fact of his map containing material obviously much earlier than the date of its publication cannot, therefore, be cited as evidence that it was based on the genuine and ancient cartographical material he says he possessed. But is this so? Considering the falsities he unblushingly introduced into his narrative, would he have taken the trouble, merely for the sake of plausibility, to laboriously select for his chart (as he clearly did in the case of Greenland) genuinely-ancient cartographic material? It seems doubtful. And, even if he did so, would he not almost inevitably have introduced into that ancient material some more modern features, obviously taken from the cartography of his own time? Probably he would; yet we find nothing of the kind in his delineation of Greenland.

To me, then, it seems that, inasmuch as one, at least, of the prominent features on the Zeno Chart (namely, Greenland) shows a marked affinity with the same country as it appears on genuine charts of about the period to which the reputed original of the Zeno Chart claims to have belonged, we may conclude that it really does date from that period, though much amended and added to later.

Among the features of the existing Zeno Chart, which we may assume to have been introduced by the younger Nicolo Zeno, in 1558, from charts later in date than either the reputed Zeno voyages or the "rotten old chart" he says he possessed, are his representations of Denmark and Scandinavia (the cartographic originals of which Mr. Lucas pretty clearly points out), together with Frisland and some other features already noticed.

Even if Mr. Lucas's view (that the Zeno Chart is purely

* They imagined that it arose from geographical knowledge far in advance of any that was current in any other quarter at the time the Zeno Chart appeared; whereas it was, in reality, due to a survival of ancient geographical knowledge long since almost lost and forgotten.

† *Annals*, pp. 103-105.

a fictitious document, concocted, in 1558, by the younger Nicolo Zeno from fragments of earlier charts) should prove correct, the interest and importance of this Zenian representation of Greenland would be but little, if at all, lessened, whatever might be the case with the rest of the Chart; for, even if the Zenian delineation of Greenland were shown to be only a copy from some much earlier chart now lost, it would still remain (as I hold) the earliest and best representation we have of the results of the ancient Scandinavian explorations of Greenland.

The Zeno Chart, then, appears to me to have much more real basis in fact than Mr. Lucas is inclined to allow. It appears (in spite of its many obvious incongruities) to present few traces of intentional, premeditated, fraudulent "cooking"; and there appears to be comparatively little in it which might not have come there quite innocently, through imperfect knowledge.

The Zeno Narrative, on the other hand, appears to me to have had very little (though probably some) real basis in fact, and to bear every evidence of having undergone much intentional, premeditated, fraudulent "cooking." Mr. Lucas has, indeed, been able to show the actual sources from which the greater part must have been built up. That the one document should be mainly genuine, while the other is mainly fraudulent, does not necessarily involve any anomaly, as has already been shown.

Before drawing to a close, it seems worth while to suggest that the following is what may have happened: That Nicolo Zeno the Knight and his brother Antonio Zeno really did voyage to the North Atlantic about 1390; that they there suffered shipwreck and underwent various adventures in the service of some chieftain or sea-rover whom they called Zichmni; that they wrote letters home to Venice; that their descendant, the younger Nicolo Zeno, in his boyhood (say, about 1530), mutilated those letters, as he says he did; that, later (in 1558, after the death, in 1557, of his father, Catarino Zeno), he sought to remedy the damage; that, finding himself unable to do so satisfactorily, he "cooked" his materials extensively in order to make a readable and exciting Narrative; that he happened also to possess an old Chart of the region his ancestors, the travellers, had visited, though it may never have belonged to those ancestors; that it was in a rotten and imperfect condition through age and neglect; that he attempted to restore it in order to make it illustrate his Narrative; that, in so doing, he introduced various incongruities (partly

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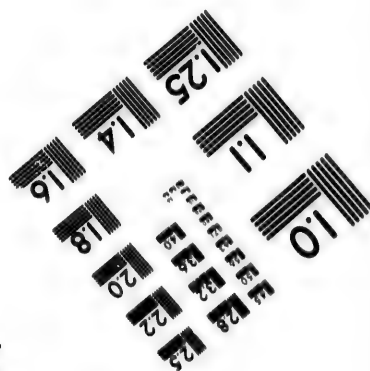
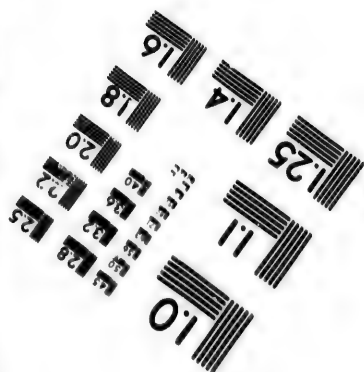
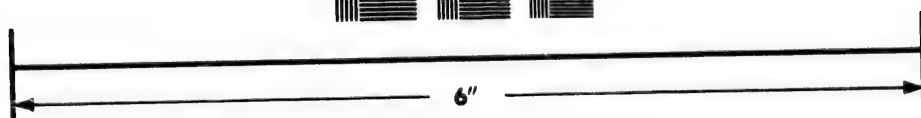
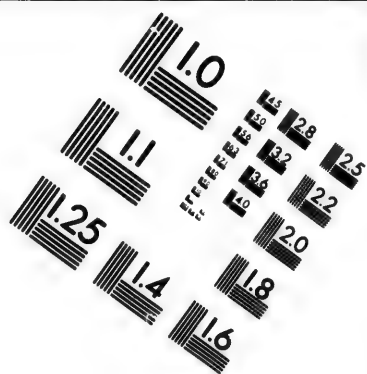
fresh features taken from later maps, which, either through ignorance or lack of skill, he showed more or less wrongly: partly fresh features which seemed to be necessary to make it accord with the Narrative as he understood it, or with the bogus passages he had introduced into it); and that, between his deliberate "cooking" of the Narrative and his efforts (partly unskilled and partly fraudulent) to restore the rotten old Chart, he produced the most perplexing historico-geographical work ever put forth.

Such speculations seem permissible in cases (such as this) where certainty is practically unattainable.

Had the Zeno Narrative and Chart been wholly bogus, as Mr. Lucas maintains, it is probable that they would never have given rise to anything like the amount of discussion that has raged around them. But for the fact (now demonstrated, I trust) that both were based, to some extent, on genuine material, their bogus nature would have been quickly recognised and they would have been speedily disregarded by all serious historians and geographers. They contained, however, sufficient genuine material to deceive many and to lead not a few good authorities to believe in the genuineness of the whole. No kind of lie is more insidious or more difficult to disprove than the half-truth.

In conclusion, I wish to repeat that this piece of friendly criticism must on no account be regarded as an attack on Mr. Lucas's book, which I regard as a monument of research practically disposing of the troublesome "Zeno Question." With most of Mr. Lucas's main conclusions I agree fully, and I have herein merely sought to show that, by rejecting *in toto* the contention that the Zeno Narrative and Chart had some real basis in solid fact, Mr. Lucas has carried his argument in one respect further than was warrantable or necessary, even from his own point of view.





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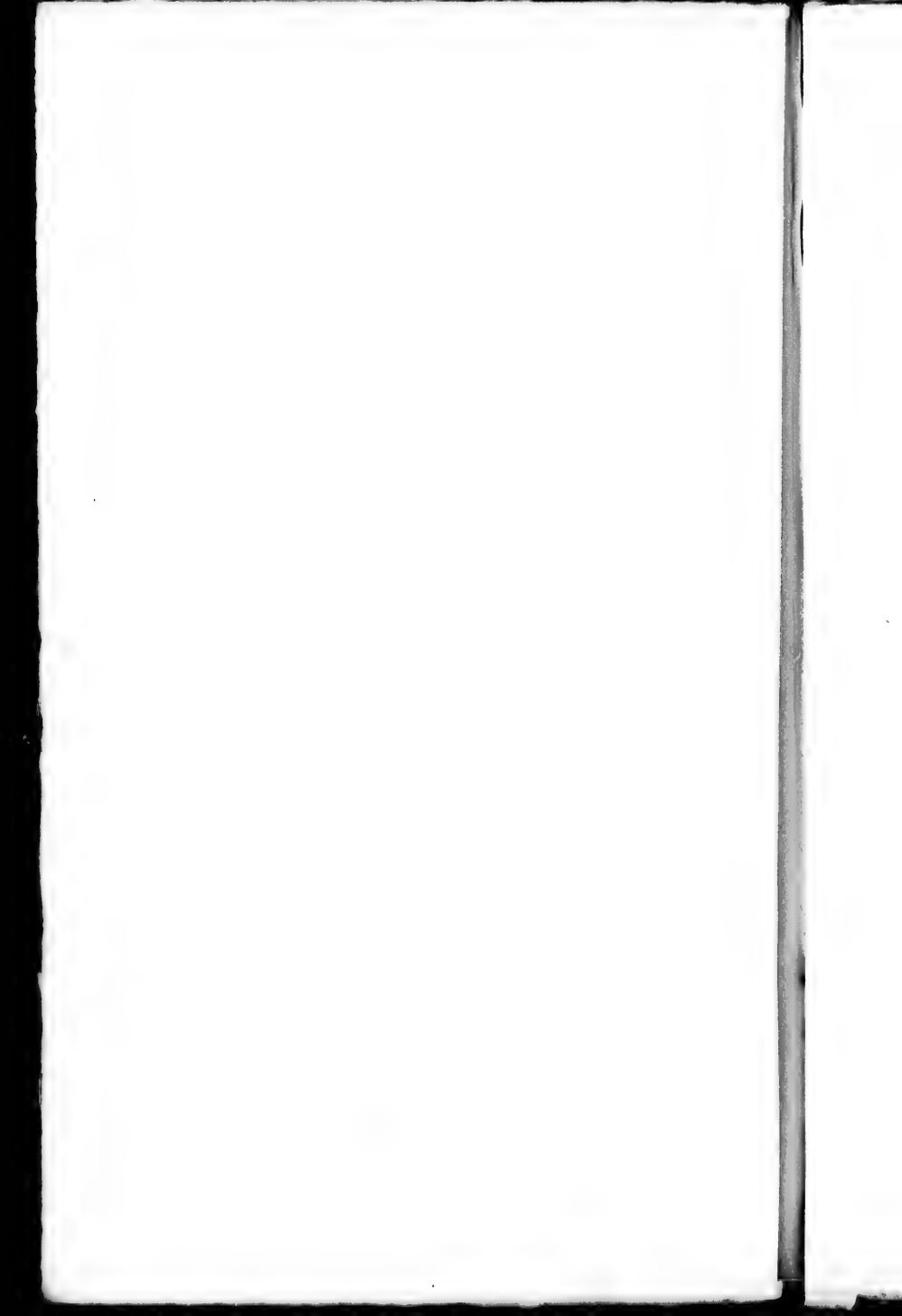
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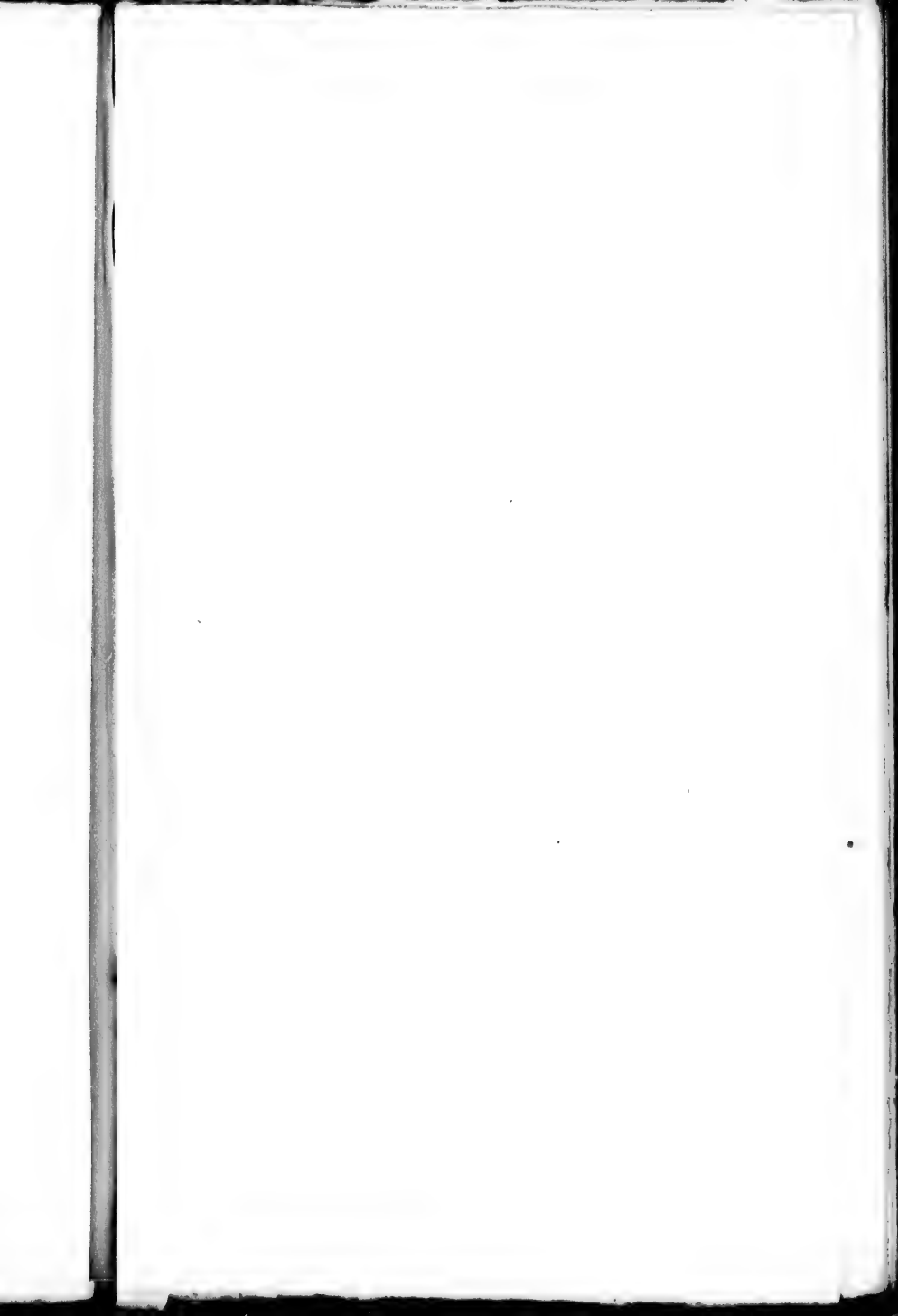
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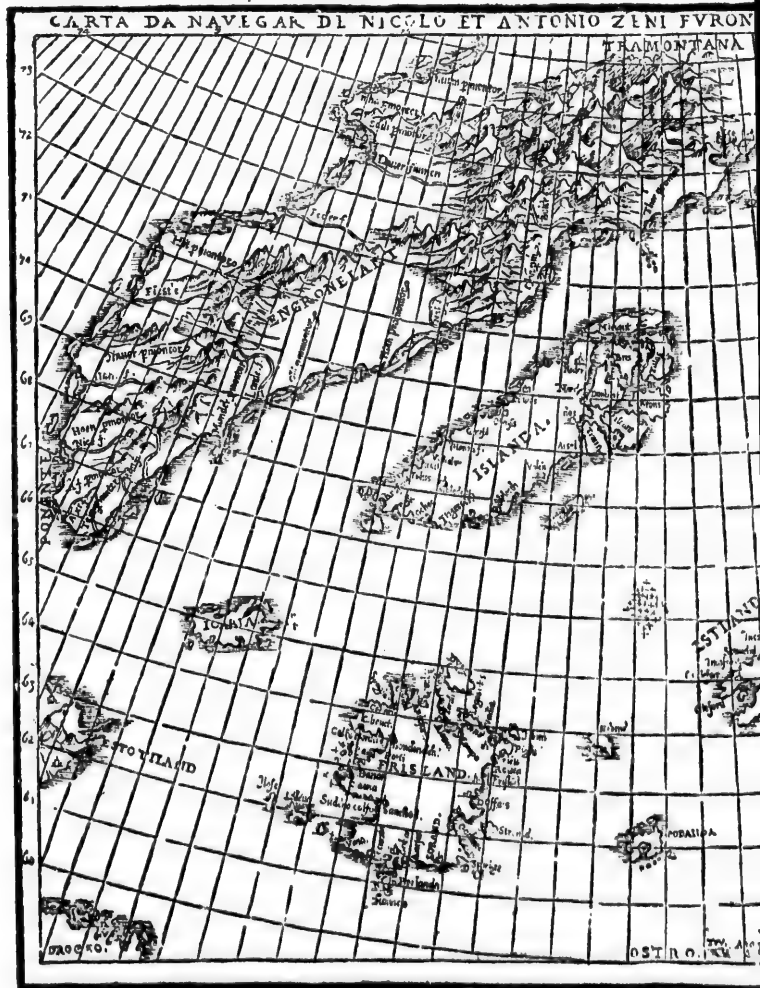
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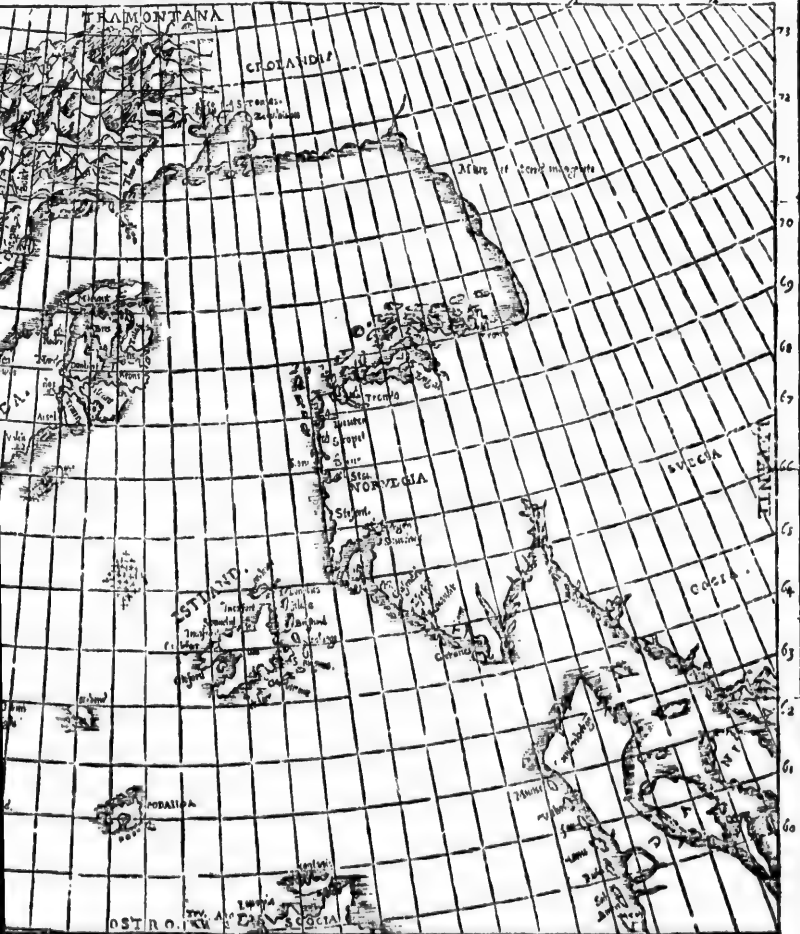


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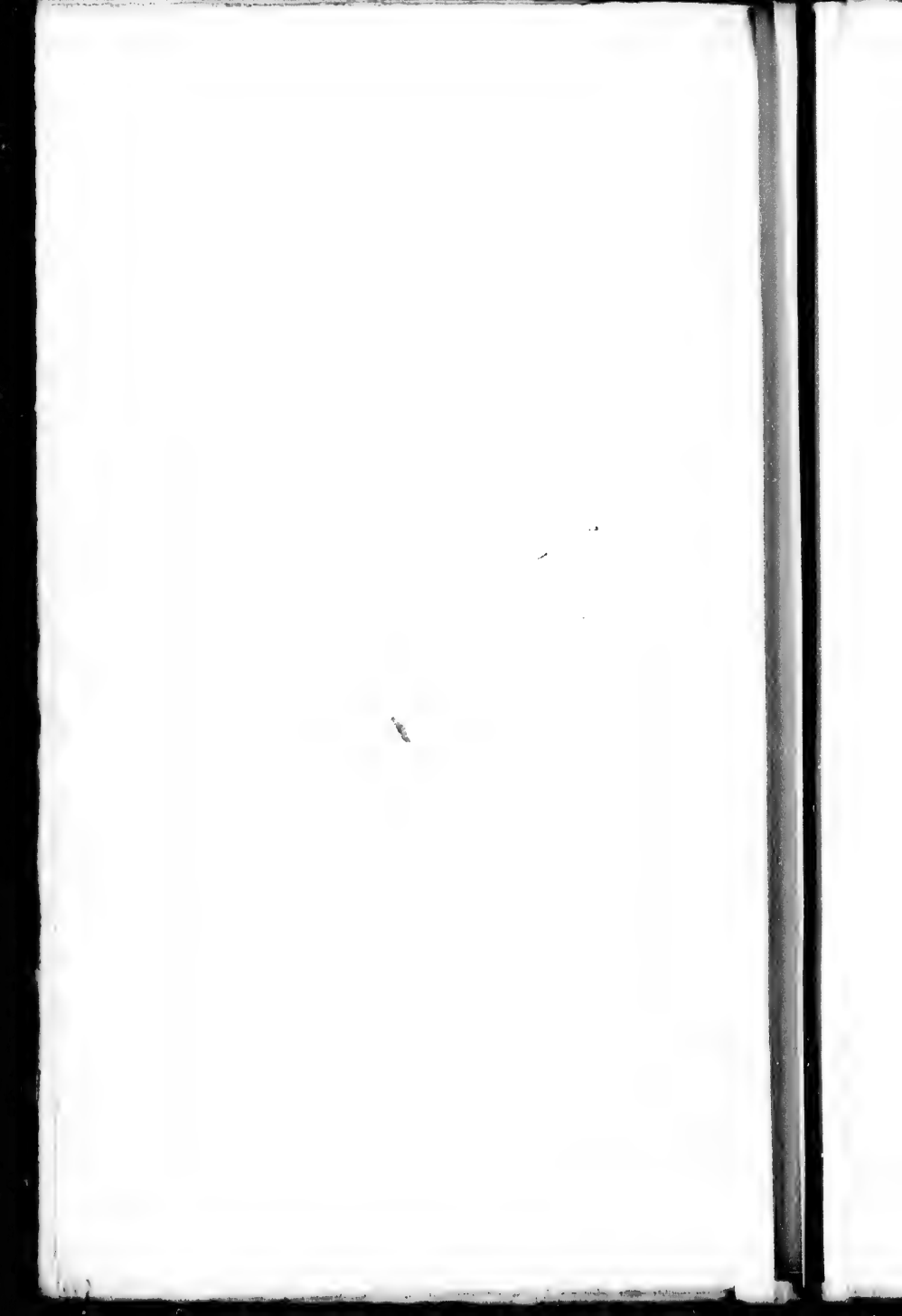
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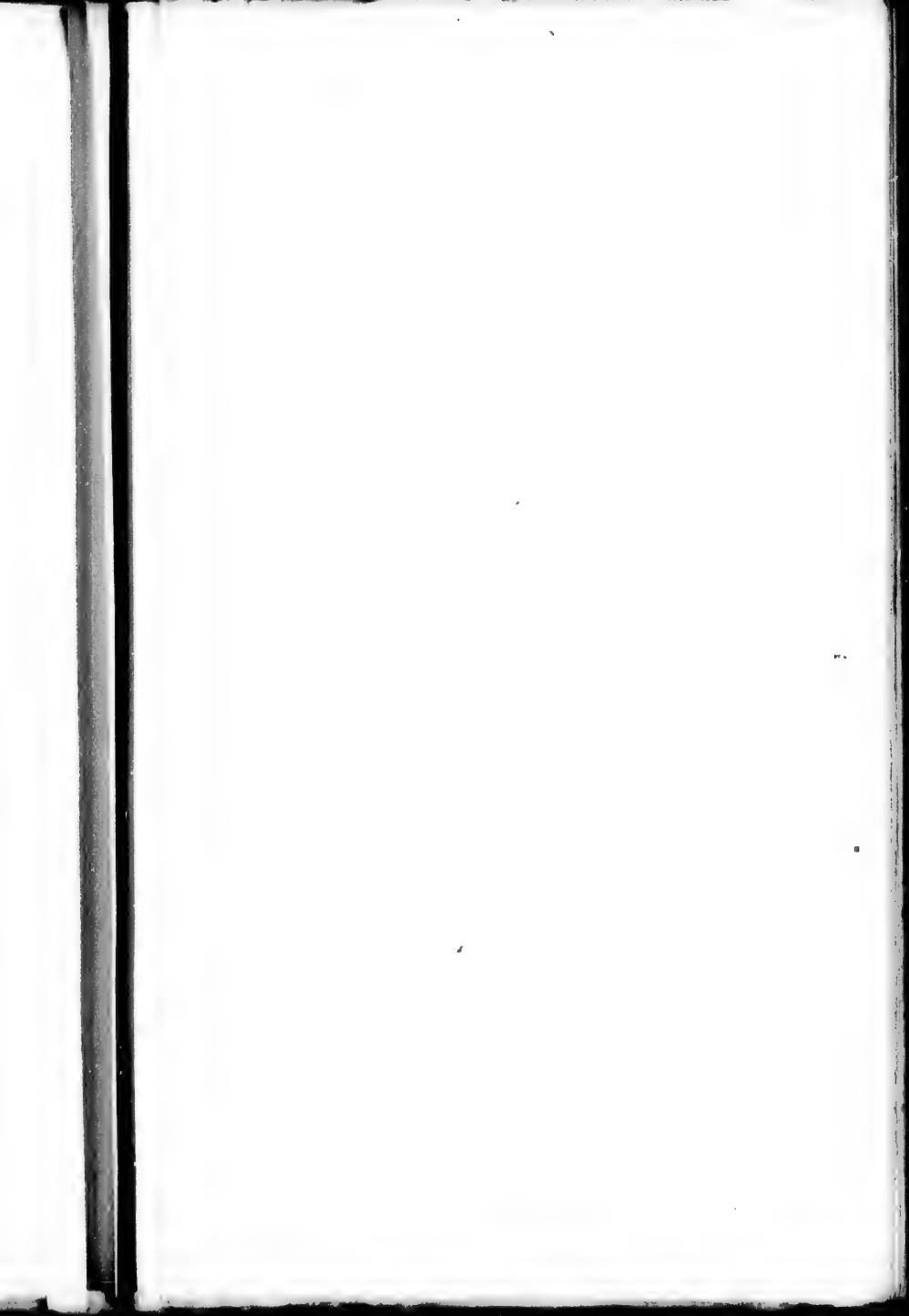
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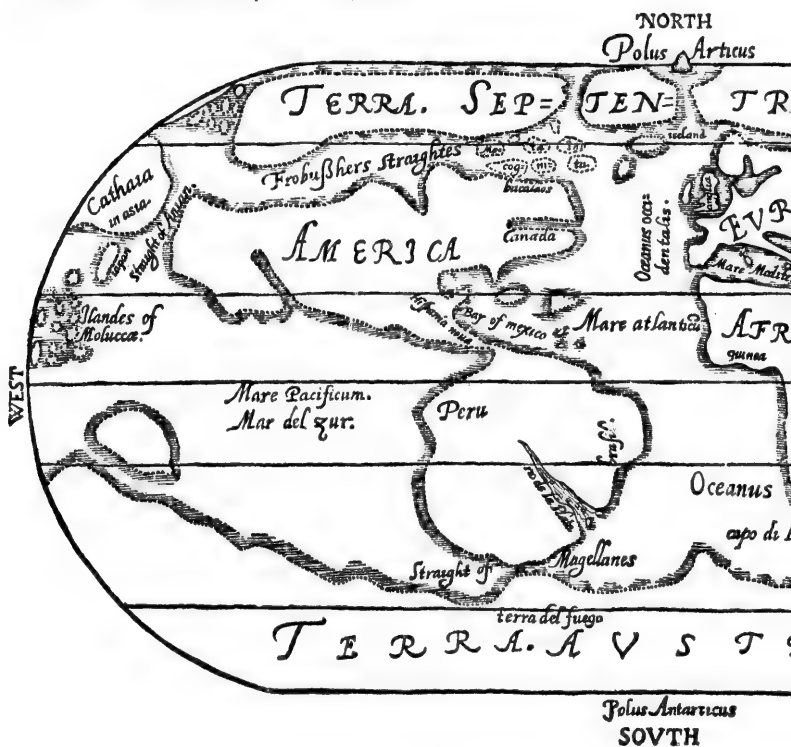
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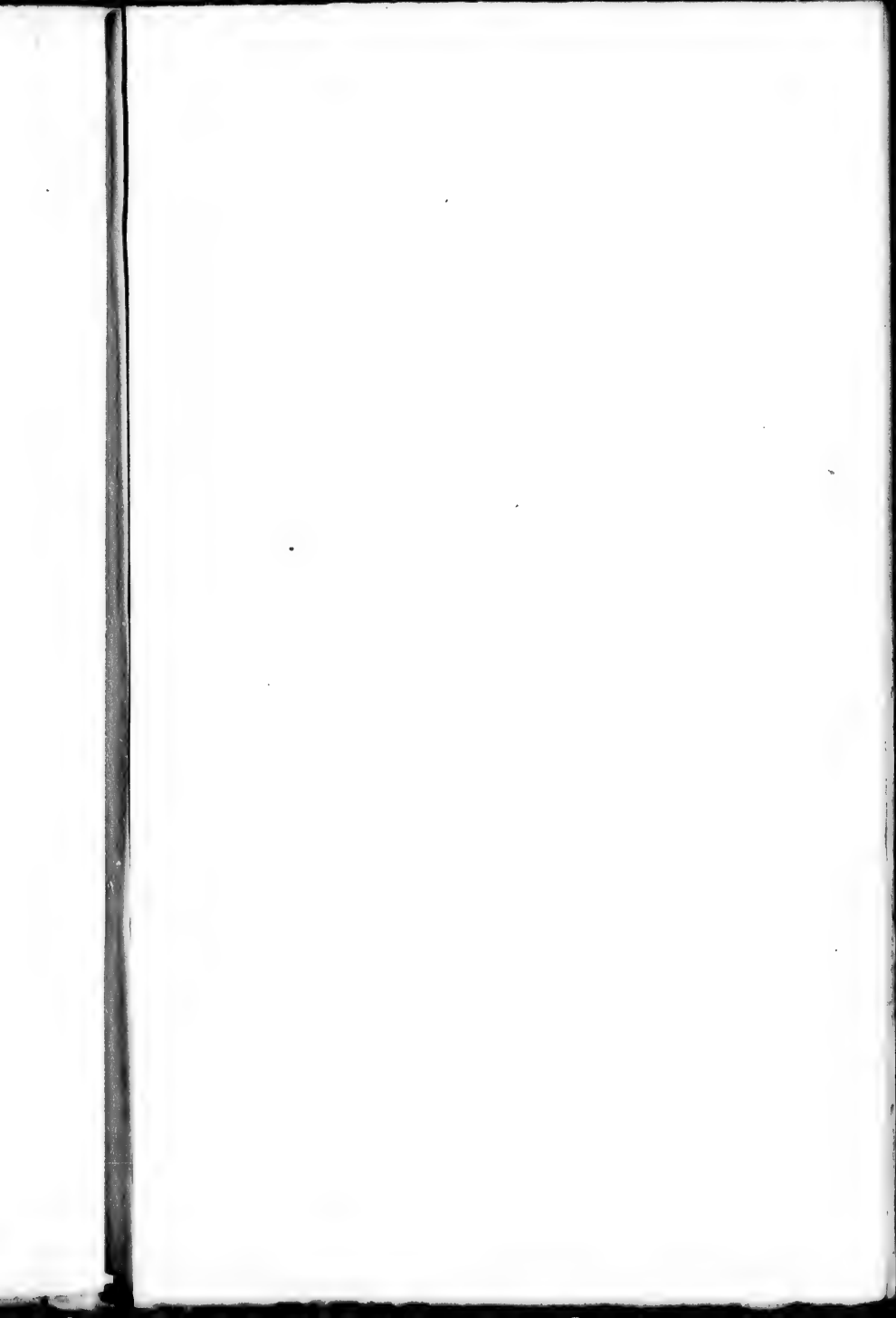
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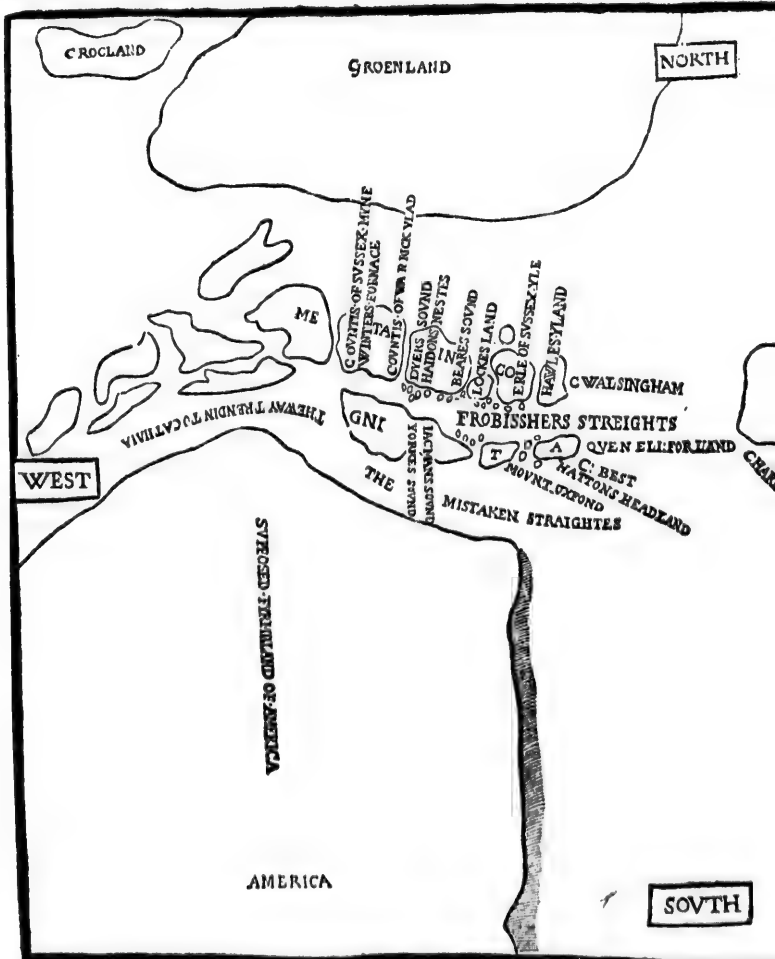
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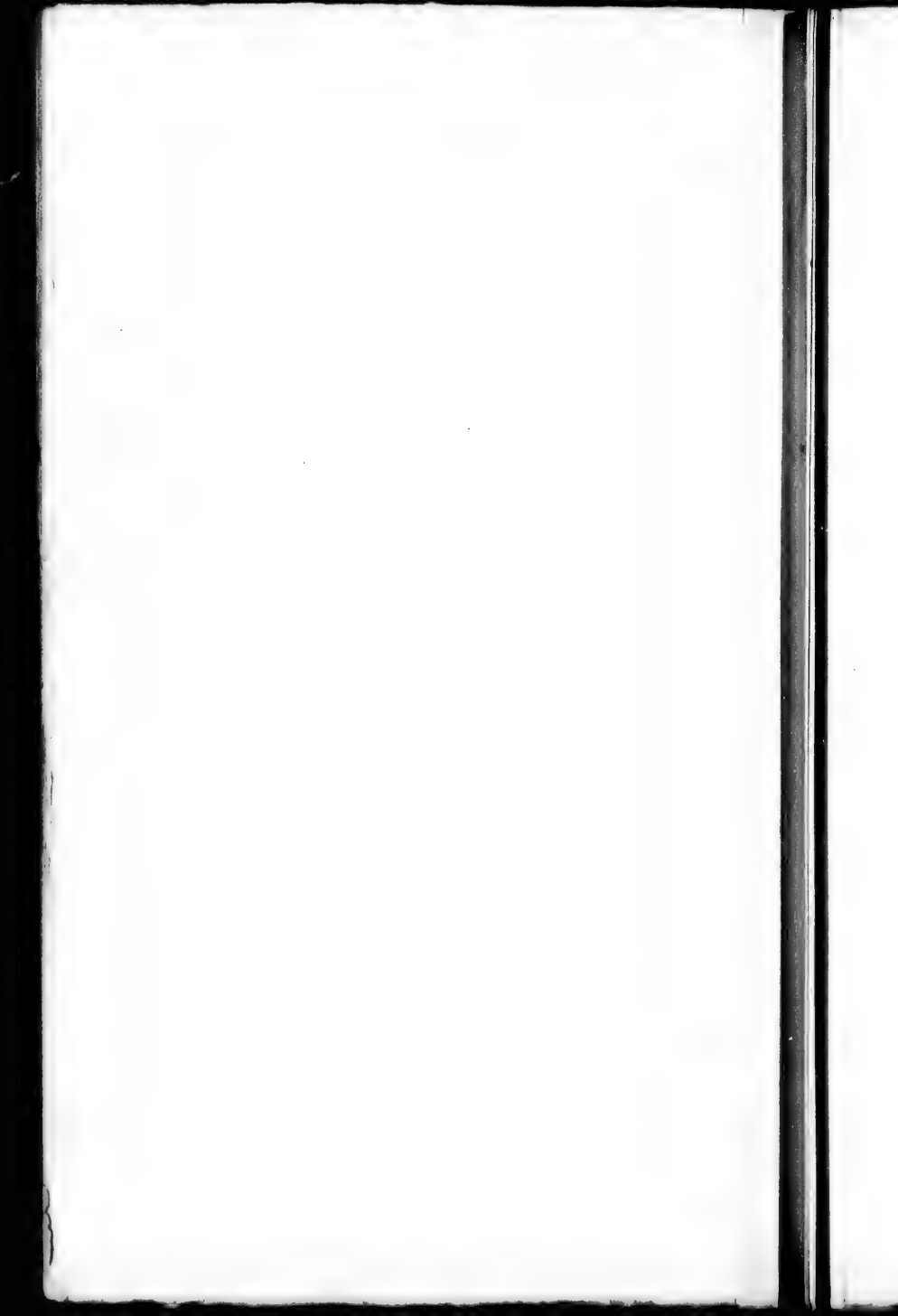
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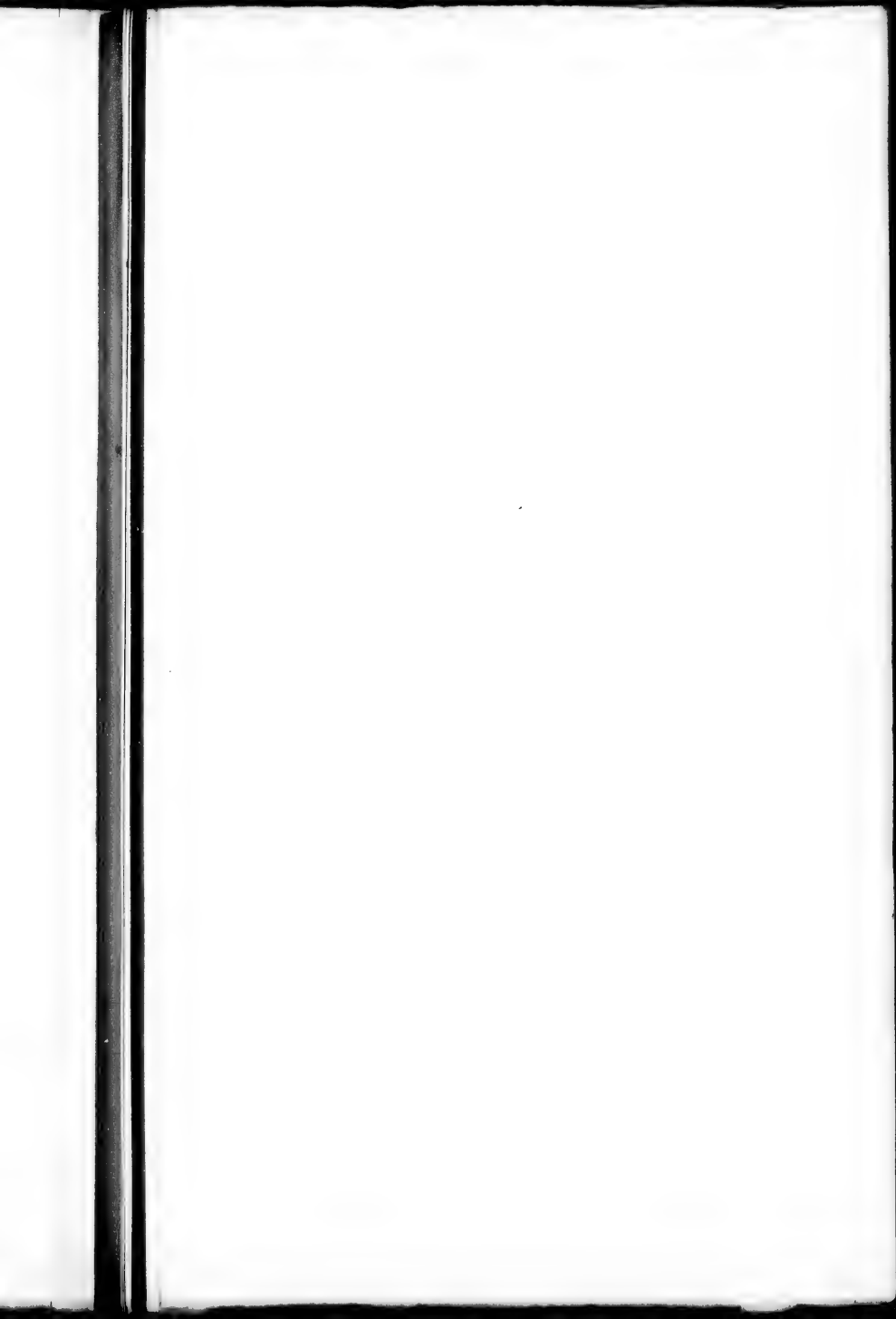




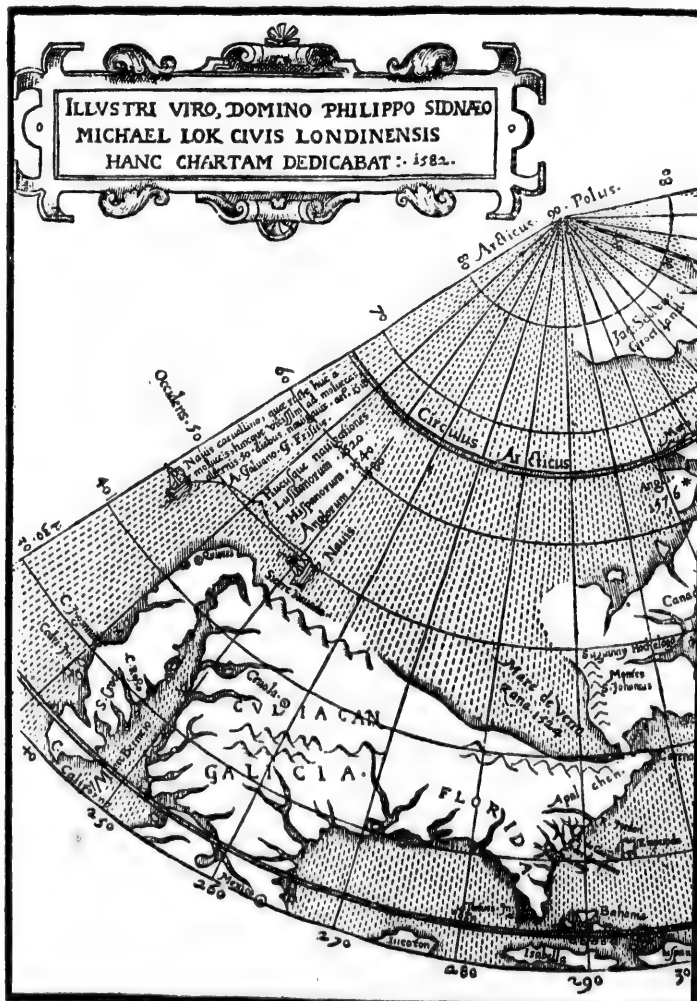
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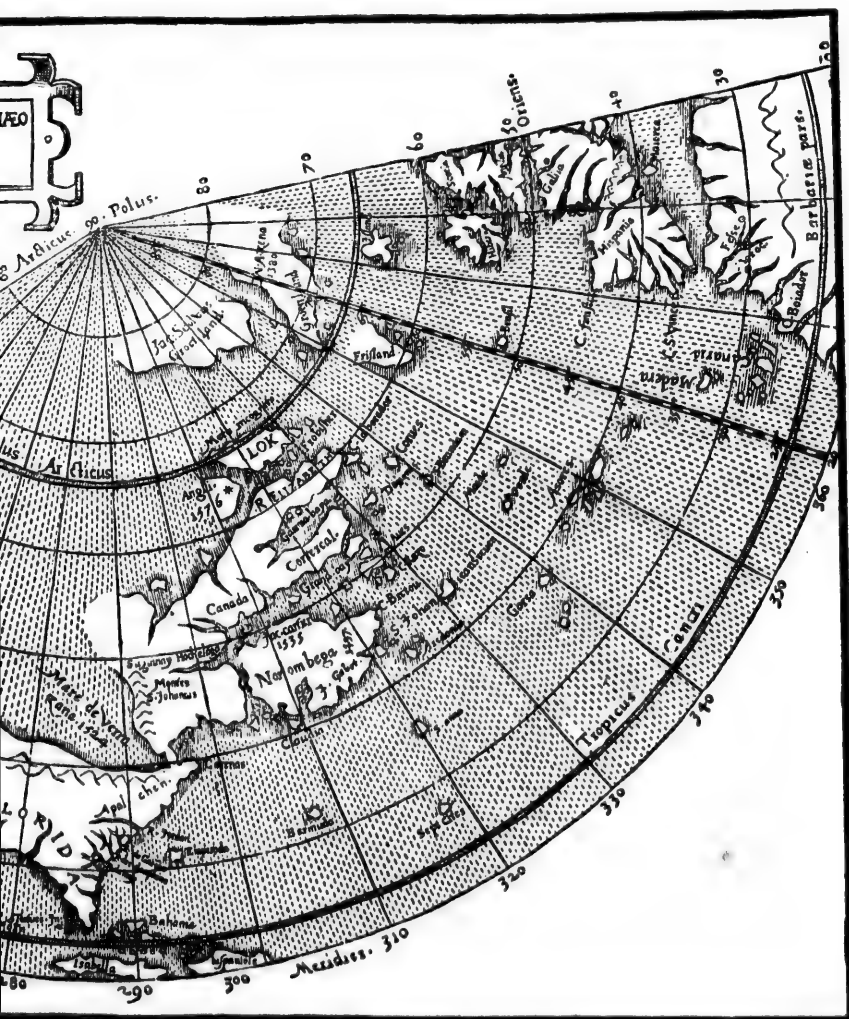




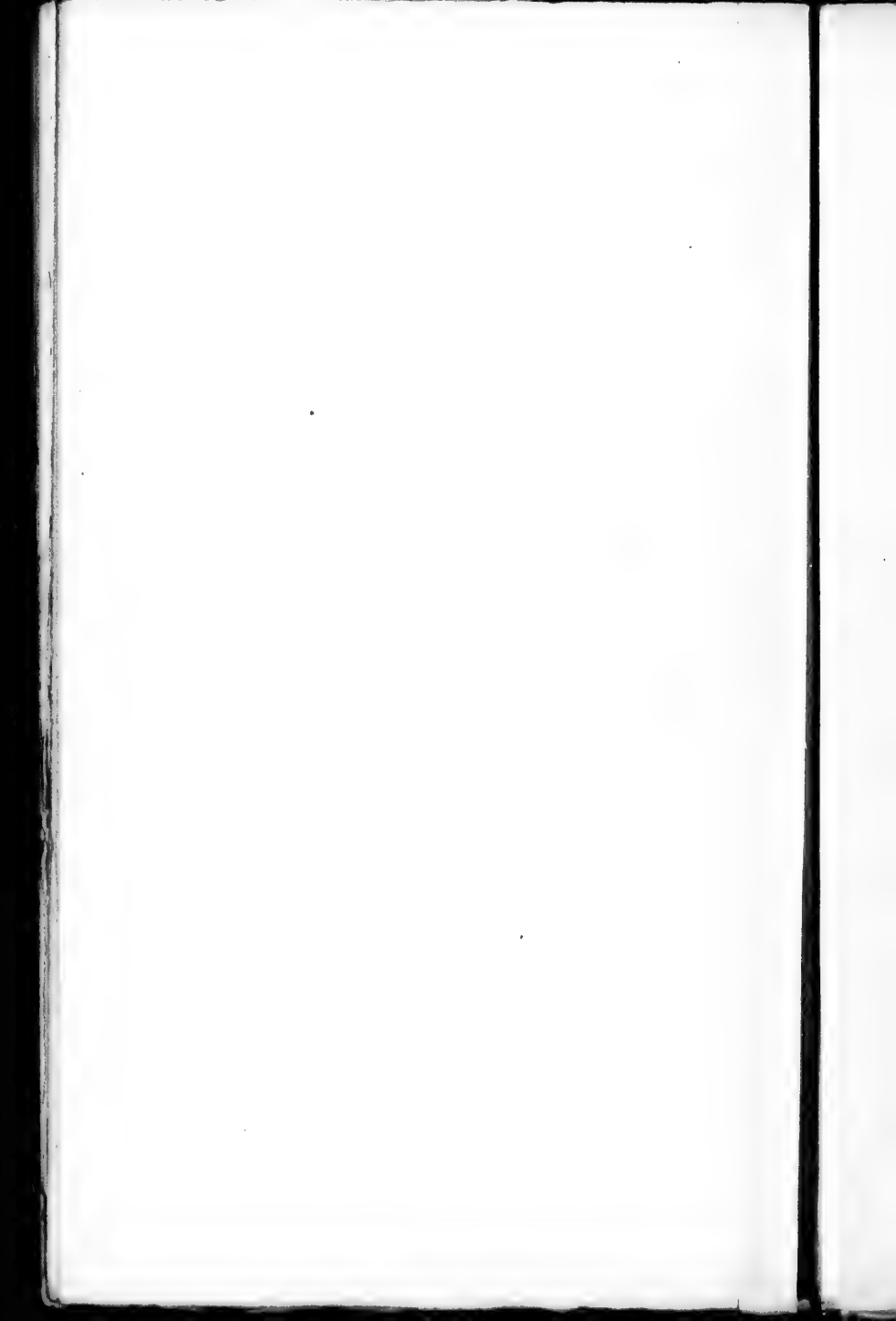
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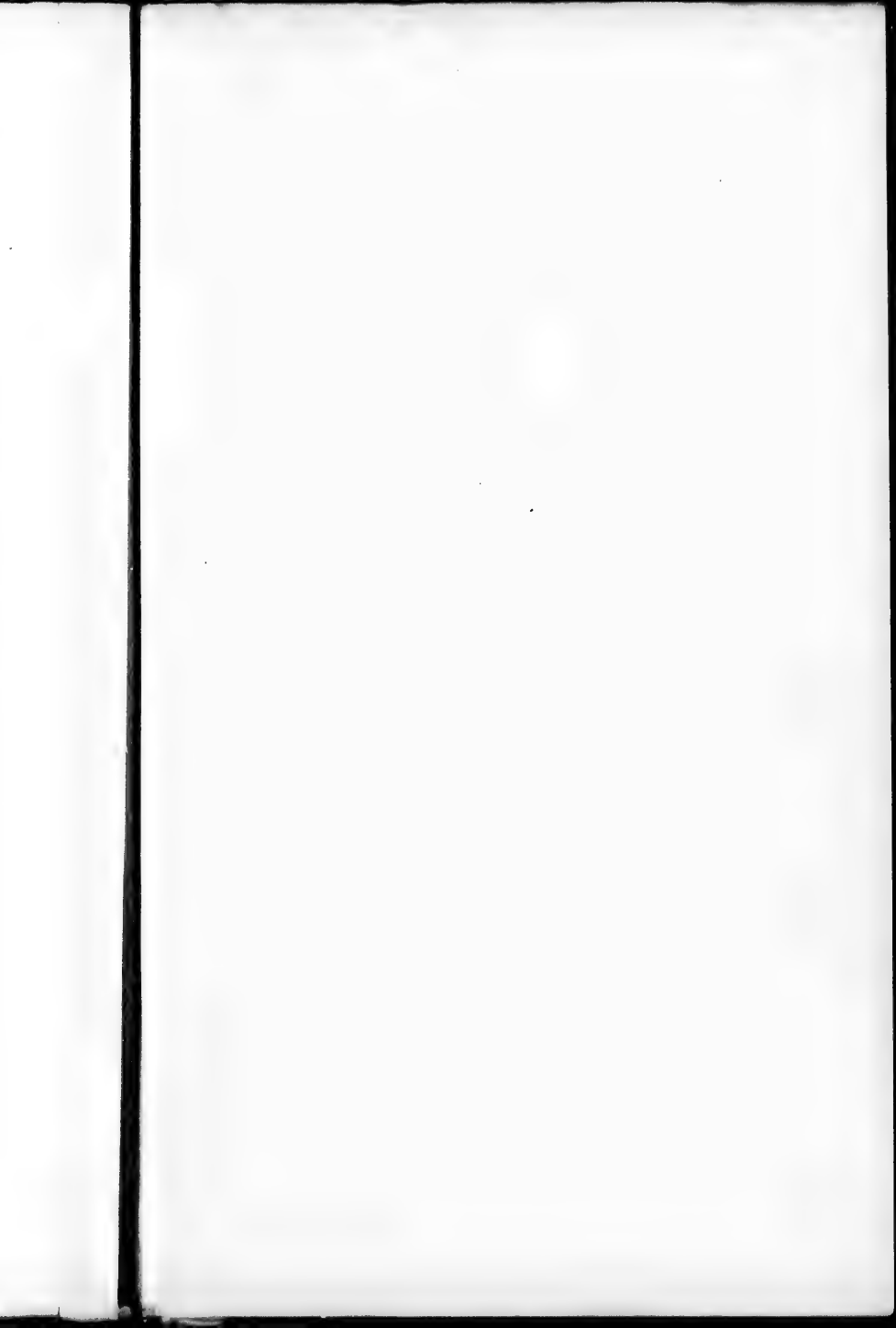


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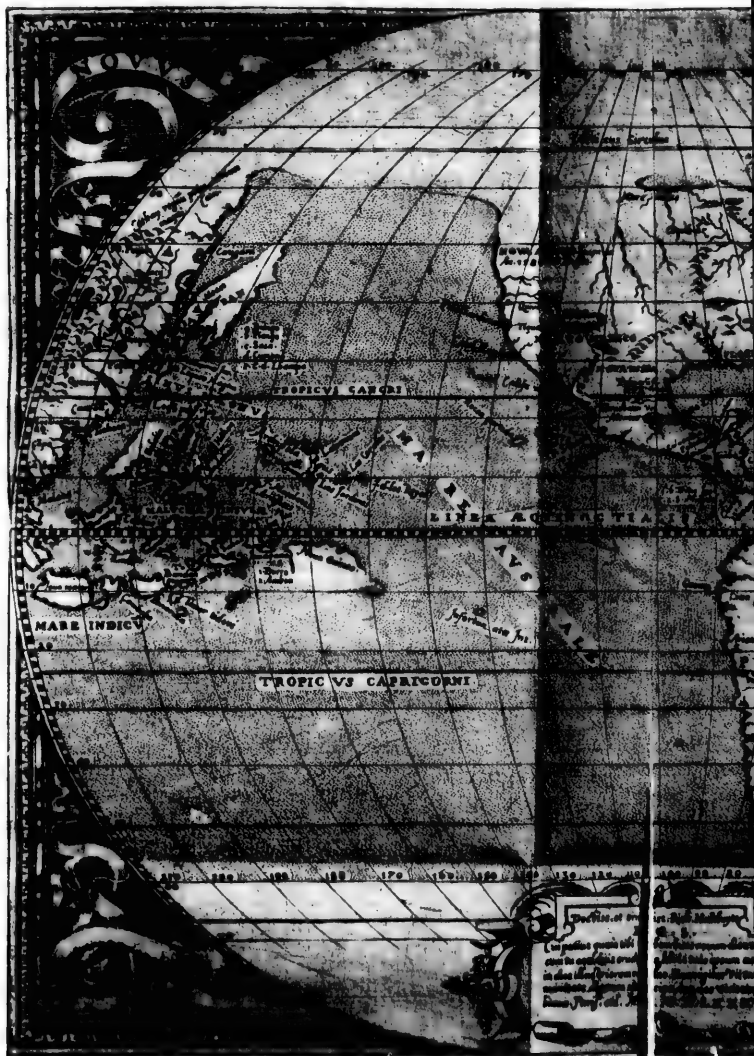


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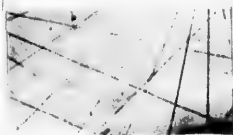
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THE NEW WORLD, OF 1586, BY F. G.
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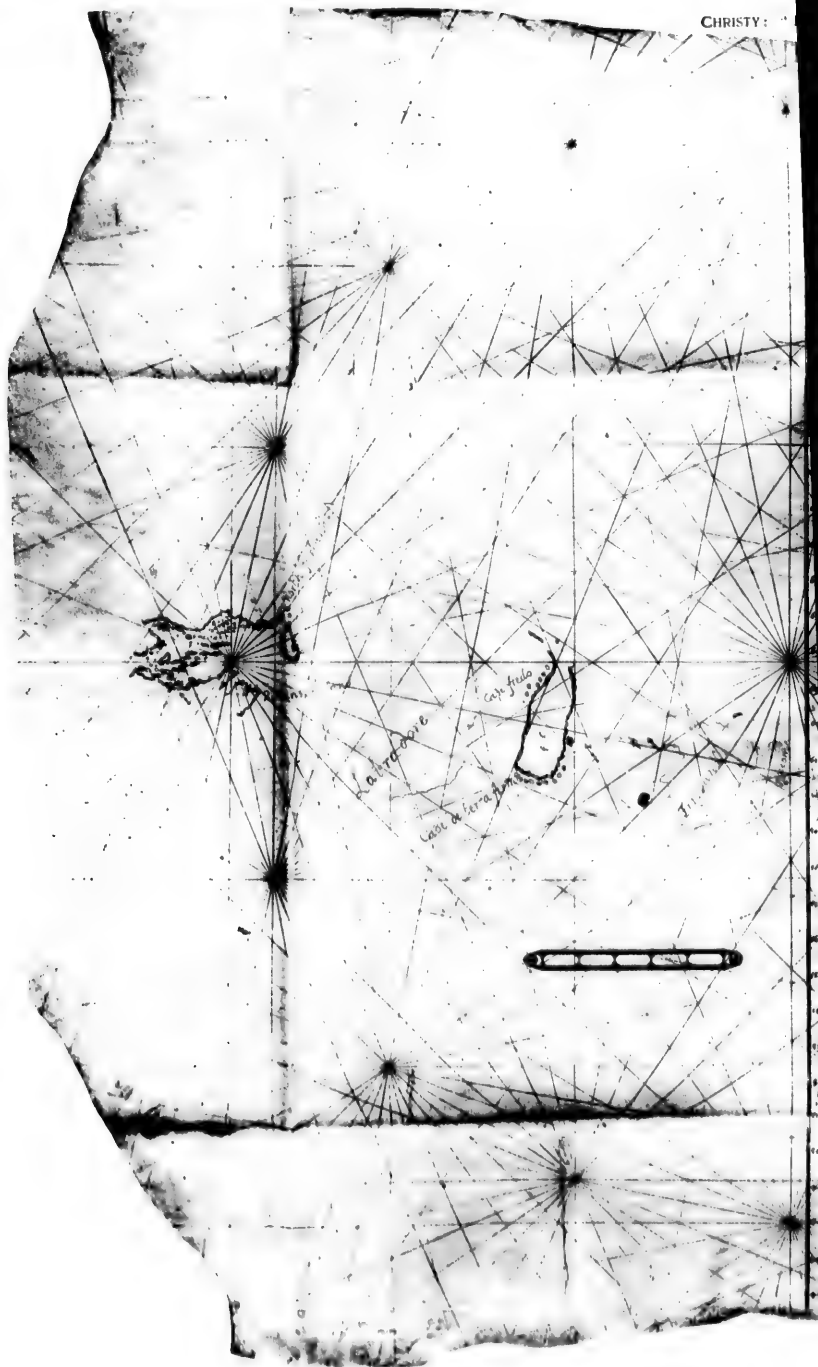
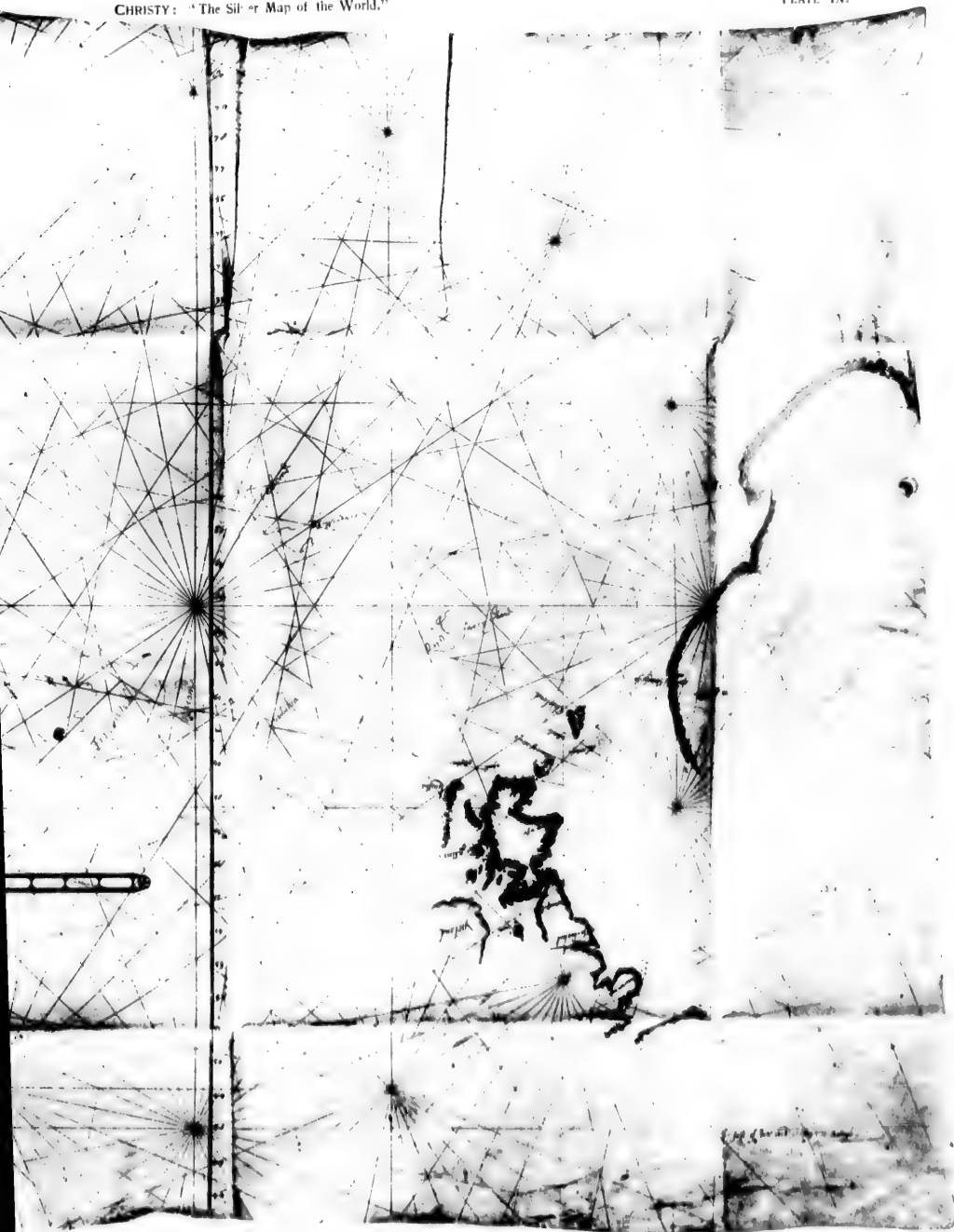


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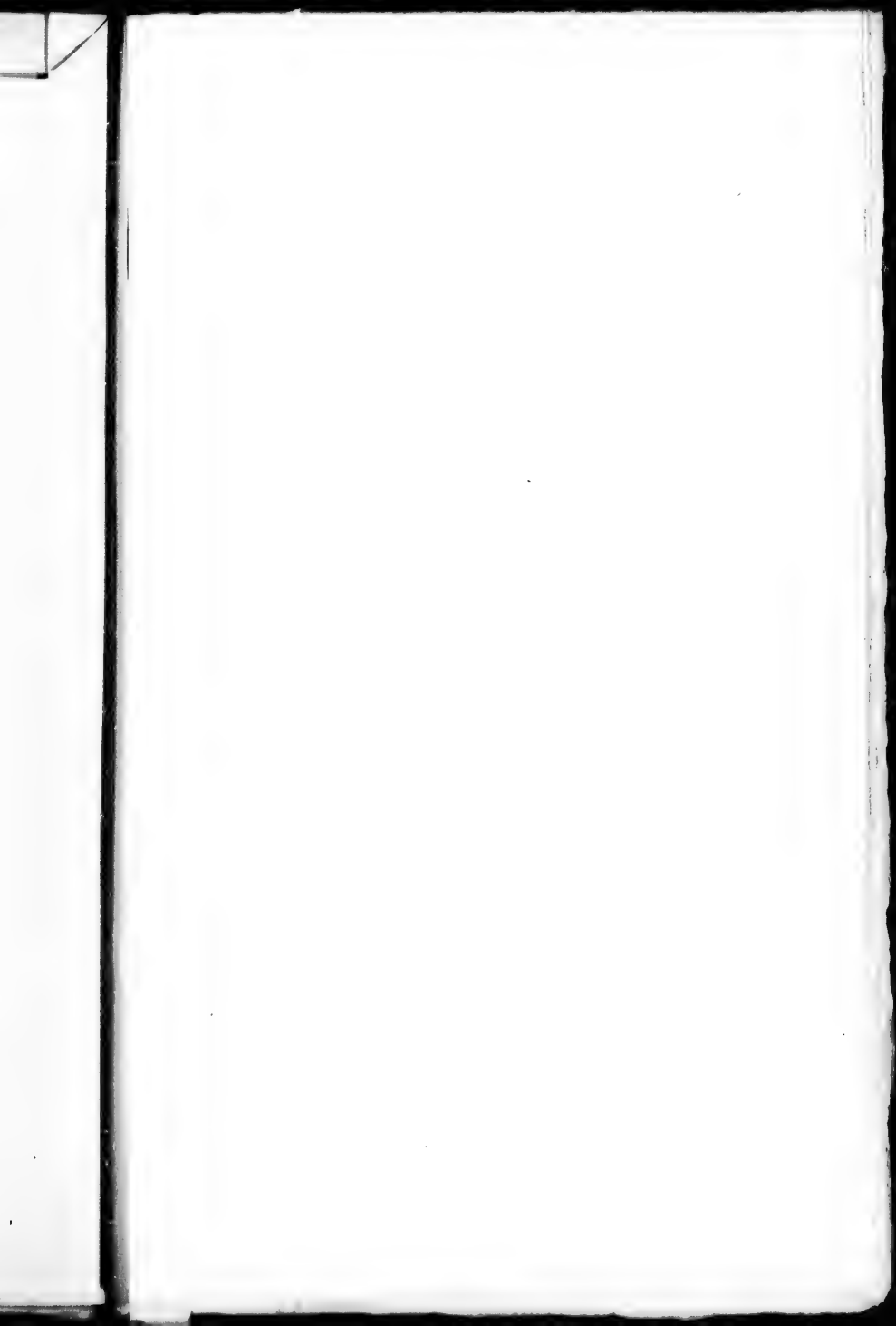
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R. MILLER CHRISTY'S work as editor of several volumes in the Hakluyt Society's series is well known.

In the present important work (which is exceptionally readable for a geographical treatise of the kind), Mr. Christy describes and discusses in detail the Silver Medallion, bearing a Map of the World, which was struck about the year 1581 to illustrate and commemorate Drake's Circumnavigation of the Globe in 1577-80.

Of this medallion, only three examples are now known to exist. Apart from its high interest as a Monument of our National History, and its extreme rarity, the map it bears (which is reproduced in *fac-simile* as a frontispiece) proves on examination to be a masterpiece of the map-engraver's art and of considerable cartographic importance. This map shows, by means of a dotted line and various inscriptions, the route taken by Drake, and the principal places he touched at are named. In all probability it was engraved in Paris, under the supervision of Richard Hakluyt, and by a certain cartographer who signed himself "F.G."

Incidentally, too, the "Silver Map" is of considerable interest in connection with the contemporary north-west voyages of Martin Frobisher, inasmuch as it is one of the few charts of the period which shows the region explored by him in its correct position on the east coast of America—not on the east coast of Greenland, where it was erroneously placed on most later maps, until quite a recent date. Mr. Christy shows in detail how this most extraordinary and

long-enduring misconception arose through certain errors of the Zeno Chart of 1558 (which is reproduced in *fac-simile*), and illustrates his remarks by means of a diagrammatic chart, in which he super-imposes the Zeno Chart (in red) upon a correct chart of the North Atlantic (in black). In this connection, the author has been enabled, by the kind permission of the Marquess of Salisbury, to reproduce, in *fac-simile*, the actual chart of Frobisher's first voyage in 1576, which is preserved at Hatfield House and is described in an appendix. It was drawn by William Borough; and, as it has not hitherto been published, its reproduction should prove a boon to students of early American cartography.

The author concludes with a long appendix in which he discusses the geographical importance and probable origin of the perplexing Zeno Chart of 1558. Though agreeing, in a great measure, with the opinions as to the fictitious character of the Zeno story and map, recently expressed by Mr. Lucas, in his exhaustive work, *The Annals of the Voyages of the Brothers Zeno*, Mr. Christy adduces, nevertheless, strong reasons for believing that the map (although it may be fictitious as illustrating the presumedly-bogus Zeno story) may, from its strikingly correct representation of certain parts then unknown, possibly have more foundation in fact than Mr. Lucas admits. His remarks (which are illustrated by a second diagrammatic chart) may well be read in connection with Mr. Lucas's treatise.

Among other contemporary charts which are reproduced in *fac-simile* as illustrating Mr. Christy's arguments in one respect or another, are Captain George Best's two maps of 1578, Michael Lok's map of 1582, F. G.'s beautiful map of the New World appearing in Hakluyt's edition of Peter Martyr's *De Orbe Novo* (Paris, 1587), and that portion of the map on Emery Mollineux's globe of 1592 which represents the North Atlantic and the countries adjacent thereto. This is the first occasion, it is believed, on which any portion of this unique and extremely interesting globe has been reproduced.

Purchasers of the book may purchase also, through the publishers, electrotype *fac-similes* of the Silver Map Medallion.

By the same Author.

ON AN EARLY CHART OF THE NORTH ATLANTIC PRESERVED IN THE ROYAL LIBRARY AT STOCKHOLM.

London: privately printed for the Author, 1897. 24 pp., Demy 8vo, handmade paper, uncut; with large folding photographic *fac-simile* of the Map; sewn in printed wrapper; a few copies only remain and these are on sale by Messrs. Henry Stevens, Son & Stiles, price 15s. each.

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CATALOGUE of my English Library, collected and described by **Henry Stevens**, Literary Agent in London of the Smithsonian Institution. Cloth extra. Privately printed by *Charles Whittingham, Chiswick Press, London, 1853. Fscap. 8vo, 7s. 6d.*

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PHOTO-BIBLIOGRAPHY, or a word on printed Card Catalogues of old, rare, beautiful and costly books, and how to make them on a co-operative system; and two words on the establishment of a Central Bibliographical Bureau or Clearing-House for Librarians. Neatly bound in roan. London: privately printed for the Author by *C. Whittingham, Chiswick Press, 1878. 16mo, 5s.*

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AMERICAN BIBLIOGRAPHER, Nos. I. and II. (*all ever printed*), Jan. and Feb., 1854, large woodcuts, vii. and 96 pp. 8vo. London, *C. Whittingham, Chiswick Press, 1854. 8vo, 7s. 6d.* Only 100 copies printed, withdrawn from sale in favour of the **NUGGETS**.

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